

Cornell University, Sage Chapel
(Sage Chapel)
Central Avenue
Ithaca
Tompkins County
New York

HABS No. NY-5726

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PHOTOGRAPHS

Historic American Buildings Survey
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HISTORIC AMERICAN BUILDINGS SURVEY

HABS
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SAGE CHAPEL

HABS NO. NY-5726

Location:

On the north side of Central Avenue, between the Cornell Campus Store and John M. Olin Library, on the campus of Cornell University, Ithaca, New York.

USGS Ithaca East Quadrangle:
Universal Transverse Mercator
Coordinates

Present Owner:

Cornell University Board of Trustees,
Ithaca, New York.

Present Occupants:

The Sage Chapel Choir, Cornell Chorus, Cornell Glee Club, and other choral groups have offices in the basement.

Present Use:

Sage Chapel serves as the university chapel, in which non-denominational services are held each Sunday of the academic year and in which various university choral ensembles practice and perform.

Significance:

Sage Chapel is significant among American collegiate chapels of the 19th century as a synthesis of the principal architectural currents that influenced the design of such edifices between 1860 and 1900. It is unusual among university buildings of its period in the harmony of design observed in planning additions to the original building.

The chapel is historically important as the setting for one of the first nonsectarian pulpits to be established in the chapel of an American university or college. Since 1875, leading preachers and theologians from most Christian sects and other influential religious thinkers of the 19th and 20th centuries have spoken in the Sage pulpit.

PART I: HISTORICAL INFORMATION

A. Physical History:

1. Dates of erection: The contract for the original chapel was authorized by Executive Committee of the Cornell University Board of Trustees, May 7, 1872. Plans for the original chapel are dated February 25, 1873 and April 27, 1873. The contract for erection was signed on June 22, 1873, and construction of the original chapel occurred between June 1873 and the spring of 1875. Dedication of the original chapel was held on June 13, 1875.¹

Plans for the Memorial Chapel are dated December 15, 1882; construction occurred between 1883 and 1884.²

Plans for the 1898-99 addition are dated February 1, 1898; construction began in May, 1898 and was completed in January, 1899.³

¹Clark S. Northup, Ph.D., "Sage Chapel: A Description. Being in Abridged Form an Address Delivered in Sage Chapel April 17, 1904" (Ithaca, N. Y.: Cornell University, 1904), pp. 6-7; Charles Babcock, architect, "Plan of Foundation Walls for the Chapel of the Cornell University, Ithaca, N. Y., February 25, 1873," Sage Chapel drawings collection, Department of Facilities and Engineering, Cornell University. Selected drawings from the collection are reproduced in the Supplemental Materials section of this report.

²Northup, op. cit., p. 15; see Charles Babcock, "The Memorial Chapel of The Cornell University. Ithaca, N. Y., December 15th, 1882," in Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Material.

³"Additions to Univ. Chapel. 1898." [account book of expenditures], pp. 7-8; 15, in box labeled "Sage Chapel," collection number 43/9/37, Department of Manuscripts and Archives, Olin Research Library, Cornell University; Charles Babcock, architect, "Plan . . . of Addition to the Chapel of Cornell University, Ithaca, N. Y., February 1st, 1898," Sage Chapel drawing collection, Facilities and Engineering, reproduced in Supplemental Material.

Plans for the 1903-5 addition are dated February 20, 1903. Contracts were signed for construction on April 1, 1903. Construction began in May 1903 and was completed in October 1905.⁴

Construction of the 1940 addition was authorized by the Board of Trustees in the summer of 1940; surviving plans for the 1940 addition are dated February and December 1940.⁵

2. Architect: Charles Babcock (1829-1913), the first Professor of Architecture at Cornell University (1871), designed the original chapel of 1873-75 and the additions made in 1883-84; 1898-99, and 1903-5.⁶ Son of an Episcopal clergyman, Babcock attended Union College in Schenectady, New York and received an A.B. degree in 1847 and an A.M. degree in the Classics in 1850. Beginning in 1848, he worked in the office of the prominent New York City architect Richard Upjohn and during the 1850s became both a partner and son-in-law of the older man. In 1857, Babcock became a charter member of the American Institute of Architects.⁷ Due to his association

⁴[Professor Charles Babcock?], "Chapel. 1903 . . .," [account book of expenditures], pp. 2, 11, 14-15. From box, "Sage Chapel," collection number 43/9/37, Manuscripts & Archives; see Charles Babcock, architect, "Ground Plan of the Sage Chapel of Cornell University, Ithaca, N. Y., February 20th, 1903," Sage Chapel drawings collection, Department of Facilities and Engineering, reproduced in Supplementary Materials section.

⁵[W. P.], "Expand Sage Chapel Facilities: Building Has Grown with University," Cornell Alumni News, 42 (August, 1940), p. 483; see Cornell Department of Buildings and Grounds, "Sage Chapel First Floor Plan," December, 1940, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

⁶Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

⁷Ethel S. Goodstein, "Charles Babcock: Architect, Educator and Churchman" (Ithaca, N. Y.: M.A. thesis, Cornell University, 1979), pp. 18; 45-46; 59-60.

with Upjohn, the young architect became well-versed in Upjohn's English-derived Gothic designs, especially as applied in ecclesiastical commissions of the 1840s and 1850s.⁸

Both Upjohn and Babcock were influenced by the precepts and model church plans advanced by the English Ecclesiologists, who wished to purify Anglican churches of Protestant elements.⁹ This was

⁸See Eberhard M. Upjohn, Richard Upjohn: Architect and Churchman (New York: Columbia University Press, 1939), pp. 48; 51-52; 75-76; 136. Evidence of similarity in exterior and interior details designed by Upjohn's office with those used by Babcock in Sage Chapel may be observed by comparing the following figures in Eberhard Upjohn's book with the photos of Sage Chapel attached as data pages to this report: interior of St. James's Church, New London, Conn. (1847-50; Fig. 30); original interior of St. Paul's Church, Buffalo (1850-51; Fig. 55); exterior of Zion Church, Rome, New York (1850-51; Fig. 56); exterior of St. Paul's Church, Brookline, Mass. (1848-52; Fig. 57); interior of St. Paul's Church, Brookline (Fig. 58); interior of Trinity Chapel, New York City (1850-55; Fig. 60); exterior of St. Philip's Church in the Highlands, Garrison, New York (1860-61; Fig. 98); and interior of St. Thomas's Church, New York City (1868-70; Fig. 103).

⁹The Ecclesiologists, originally known as the Cambridge Camden Society, were a High Church reform movement within the Anglican Church who wished to purify liturgy and church design by removing Low Church, or Protestant elements that had become part of church design since Henry VIII broke with the Pope in the 16th century. Through their journal, The Ecclesiologist, the society prescribed model church plans during the 1850s and 1860s and endorsed the ecclesiastical designs of such English architects as William Butterfield, George Street, and James Brooks, who planned brick churches with original details in vivid polychromatic patterns. Both Upjohn and Babcock subscribed to The Ecclesiologist and were therefore familiar with the work of Butterfield, whose All Saints, Margaret Street church in London (1850-59) was especially influential among contemporary English and American architects. See Goodstein, op. cit., pp. 46-50; E.

especially true of Babcock, who became an Episcopal priest in 1860.¹⁰

Babcock was also influenced by the writings and illustrative plates published by the English art critic John Ruskin, in his Seven Lamps of Architecture (1849) and Stones of Venice (1851-53). The specific influences of Ruskin are especially seen in the Venetian Gothic details and polychromatic scheme of Babcock's design for Sage College for Women at Cornell (1872) the year before the architect designed the original Sage Chapel.

While he was professor of architecture at the university, Babcock was called upon during the 1870s and 1880s to design several buildings erected by the university, including the Sage College for Women, Sage Chapel, Franklin Hall (electrical engineering) and Lincoln Hall (civil engineering). When requirements for additions to the chapel arose in the 1880s and 1890s, Babcock prepared the plans. He held a special interest in the chapel, serving during much of the same period as rector of St. Paul's Episcopal Church, a congregation of families associated with the university who worshipped in the south transept of the original chapel.¹¹

In 1896, Babcock was appointed the first Dean of the new College of Architecture at Cornell. He retired from the faculty the following year, but continued to reside on campus in a residence located immediately east of Sage Chapel.¹² During the next fifteen years, until his death in 1913, Babcock supplied the plans for all additions and alterations to the chapel.¹³

Upjohn, op. cit., p. 48.

¹⁰Goodstein, op. cit., p. 63.

¹¹Northup, op. cit., p. 6; Goodstein, op. cit., pp. 121-22.

¹²Goodstein, op. cit., pp. 102-27.

¹³See Sage Chapel drawings collection, Facilities and Engineering.

The Cornell University Department of Buildings and Grounds prepared the plans for the 1940 addition to Sage Chapel. The name of the draftsman(men) does not appear on the drawings of 1940-41.¹⁴

3. Artists and Craftsmen: Robert Richardson, a stone carver from England brought to the United States at the behest of Cornell's founding president, Andrew Dickson White, served as stone carver. White had previously employed Richardson to carve the capitals, capitals for columns, and spandrels at the president's house and at Sage College. In the 1873-75 Sage Chapel, Richardson created the stone traceries, column capitals, and the corbels supporting the trusses of the roof. He also contributed the details of the stone vaulting, corbels, and tracery employed in Babcock's design for the 1882-84 Memorial Chapel.¹⁵

The mosaic processional and ceiling panels in the Sage Memorial Apse of 1898-99 were designed by Charles Rollinson Lamb of New York City and executed by the mosaic art firm of J. and R. Lamb of New York. Paintings and studies of the groups of figures were made by Ella Condie Lamb, wife of Charles R. Lamb. The studies of the single figures in the panels were drawn by Chester Loomis of the Cornell Class of 1872. Frederick Stymetz Lamb drew the mosaic panels in the ceiling of the apse.¹⁶

The firm of J. and R. Lamb also designed and made the wrought iron doors that were installed in 1903 at the entrance to the memorial chapel. Six windows

¹⁴See 1940 drawings, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Material section.

¹⁵See [The] Autobiography of Andrew Dickson White (New York: The Century Co., 1905), pp. 408-9.

¹⁶Northup, op. cit., p. 14; "A Great Decoration in Mosaic," Harper's Weekly [c. 1899 clipping], p. 558 in folder, "Sage Chapel," Department of Manuscripts and Archives, Cornell.

also designed by the firm were installed at that time in the main chapel.¹⁷

The New York interior decoration firm of Cottier and Company designed and carried out the 1903 decorative scheme of the chapel, including the aisles of terrazzo and mosaic, the mosaic panel in the floor of the chancel, the painted canvases on the walls of the chapel above the wainscoting, and the painted motifs covering the ceiling panels and trusses of the main chapel.¹⁸

4. Original and subsequent owners: The site of Sage Chapel was part of the land given by Ezra Cornell for the establishment of Cornell University in 1865. The chapel has been continuously owned by the Board of Trustees for the university since 1873.

5. Builder, contractor, suppliers:

1873-75 chapel: John Snaith of Ithaca, general contractor; Michael Mone, builder of foundation; O'Connor and Geiger, suppliers of cut-stone; George Diffin, supplier of cut-stone. Approximate cost of construction: \$23,000.¹⁹

1882-4 Memorial Chapel: No record found of contractors or suppliers of building materials.

1898-99 addition: Jacob Peters of Ithaca, general contractor; Stephens and Masters, suppliers of gas pipes and radiators; suppliers of building materials not known. Cost of construction: \$33,804.²⁰

1903-5 addition: Campbell Bros. & Co. of Ithaca, general contractors; Stephens and Masters of Ithaca,

¹⁷Northup, op. cit., p. 8; "Chapel. 1903." [account book], op. cit., p. 2.

¹⁸Northup, op. cit., pp. 8-9.

¹⁹Unlabeled account book containing lists of expenses for 1873 construction of Sage Chapel, pp. 1-3, in box, "Sage Chapel," Department of Manuscripts and Archives, Cornell.

²⁰"Additions to Univy. Chapel. 1898.," op. cit., pp. 2-3; 16; Norton and Hannford's Ithaca City Directory for 1898-99 (Ithaca, 1898), p. 240.

suppliers of gas pipes and radiators. Approximate cost of construction: \$9,000.²¹

1940 addition: Construction supervised by the Cornell University Department of Buildings and Grounds; no record of subcontractors found. Cost authorized by the Board of Trustees for construction: \$48,000.²²

6. Original plans and construction: The original chapel, erected in 1873-75, seated about 500 people. The nave, seating 400 congregants, was rectangular in plan and ran east and west, the chancel and pulpit being located at the east end. A side chapel resembling a transept adjoined the nave to the south of the chancel and provided seating for an additional 100 persons. Entry to the nave was through porches adjoining the north and south elevations west of the chancel. The side chapel was reached through entries to the east and west of its south end. A tower at the re-entrant angle between the nave and side chapel contained the organ for the edifice.²³

The 1873-75 chapel was constructed of red brick, with polychromy introduced in the elevations by means of buff brick, black-glazed brick, and stone stringcourses and watertables. The gable roofs were covered with ribbon slate, both rectangular and scalloped in shape.²⁴ The north and south elevations of the nave contained lancet windows, while a rose window and paired lancets appeared in the west elevation. The single window in the east elevation consisted of multiple lancets and culminating quatrefoils and star, adapted from 13th century English sources. The tower was surmounted by a pyramidal roof supporting in turn an open-work observation platform and a broach spire.

²¹"Chapel. 1903." [account book], op. cit., pp. 2-3; 9; Norton and Hannford's Ithaca City Directory for 1903 (Ithaca, 1903), pp. 92; 323.

²²[W. P.], "Expand Sage Chapel Facilities," op. cit., p. 483.

²³Northup, op. cit., pp. 6-7.

²⁴See Supplemental Material section, Historical Photographs 2, 3, and 6.

In the interior of the nave, a central aisle approached the speaking platform at the east end. Oak wainscoting ran along the walls of the nave below the sills of the windows. The walls above the window sills were plastered and painted in polychromatic bands. The open wood roof of the nave was supported by hammerbeam trusses springing from stone corbels carved by Robert Richardson. The trusses, crown posts, struts, rafters, purlins, and ceiling panels were stained a natural color. In accord with the non-sectarian nature of the chapel, there was no altar at the east end. At the center of the speaking platform was a pulpit, behind which was a sedilia containing five seats. Along the south wall of the nave a trio of lancet windows were surmounted by voussoirs of alternating buff and red bricks, a scheme also observed in the Venetian Gothic arches leading to the tower and into the side chapel.

The plans for the original chapel, dated February 25, 1873; drawings of the four elevations, dated April 27, 1873; and a section drawing of the main roof, dated February 25, 1873, may be found in the Department of Manuscripts and University Archives at Cornell.²⁵

Pre-1898 photographs depicting the exterior of the original chapel from several vantage points and interior views may be found in the photograph collection for K. C. Parsons' book, The Cornell Campus, found in the Cornell Department of Manuscripts and University Archives. Another photograph is found in the Parsons book itself.²⁶ Two bird's eye photographic views of the original chapel are found in Seth L. Sheldon's Photographic Gems, Being a Collection of Views of Cornell

²⁵Microfilm copies of these drawings are available at the Cornell Department of Facilities and Engineering (see copies in the Supplemental Material Section).

²⁶See Kermit Carlyle Parsons, The Cornell Campus: A History of its Planning and Development (Ithaca, N. Y.: Cornell University Press, 1968), p. 84.

University.²⁷ The photograph collection of the DeWitt Historical Society also contains many photographs of the chapel in the 19th and early 20th centuries.

7. Alterations and additions:

1882-84 Memorial Chapel. In his autobiography, Andrew Dickson White, the first president of Cornell, explained how the university came to build the first addition to Sage Chapel:

[After the death of Ezra Cornell, the founder of the university] . . . it was felt that his remains ought to rest on that beautiful site, [of Sage Chapel] in the midst of the institution he loved so well; and I proposed that a memorial chapel be erected, beneath which his remains and those of other benefactors of the university might rest, and that it should be made beautiful.²⁸

Cornell had died in 1874. After the death in 1881 of Jennie McGraw Fiske, a wealthy benefactrix of the university, the executors of her estate offered to donate funds to underwrite much of the cost of a memorial chapel to commemorate the lives of Mrs. Fiske and her father, John McGraw, as well as that of Ezra Cornell. The university Board of Trustees agreed to raise the remainder of the cost, and Charles Babcock prepared the plans.²⁹

The rectangular chapel was erected north of the nave of the main chapel, with a passage built to connect the two buildings. The passage replaced the north porch of the 1873 chapel. The red brick walls, polychromatic treatment, and gray slate of the roof harmonized with the design of the main chapel. The multiple lancets in the tracery, window gables projecting above the cornice of the roof, and steep, pyramidal roof culminating in finials derive from 13th century French and contemporary American

²⁷(Ithaca, New York, 1897), n. p.

²⁸Autobiography of Andrew Dickson White, op. cit., pp. 408-9.

²⁹Northup, op. cit., p. 15.

sources, rather than the English antecedents of the 1873 edifice.³⁰

Miscellaneous changes, c. 1885-98. After the death in 1885 of Susan Linn Sage, wife of Henry W. Sage, donor of the Chapel, her two sons, Dean and William H. Sage, donated art glass lights for the tracery of the east window of the chapel.³¹ Sometime after these lights were installed, a trio of lancet windows matching the design of those in the south wall of the nave were cut in the north nave wall, directly opposite the original trio. Two historical photographs in the Cornell Department of Manuscripts and University Archives³² document the installation of the northern trio, which did not exist in the original nave. The first photograph, looking east in the nave, shows the Sage memorial east window, with the wall corresponding to the present location of the trio empty. The second photograph, taken from the same vantagepoint before 1898, shows the fenestration in place.

1898-99 addition. Between 1875 and 1898, the Cornell student body increased from 496 to 1835 in number. The Board of Trustees appropriated funds, possibly donated in part by the Sage family,³³ to enlarge Sage Chapel to accommodate the growing Sunday congregations and employed Charles Babcock again as architect.³⁴

The eastern half of the 1873 nave, the side chapel, and the re-entrant tower were all demolished, and four transepts to the north and south were erected to the east of the remaining section of the nave.

³⁰See statement on "Architectural Character" in Part II.

³¹This east window survives in the east facet of the Sage memorial apse.

³²See Supplemental Material section, Historical Photographs 9 and 10.

³³Henry W. Sage, patriarch of the family and Chairman of the Cornell Board of Trustees, had died in 1897. The family may have contributed funds to the enlargement project in his memory.

³⁴Northup, op. cit., p. 7.

The north and south elevations each consisted of two parallel gable roofs, providing an additional floor space of 66 by 64 feet and allowing an increased seating capacity for the main chapel of 800. The plan of the chapel was changed from a rectangle to a Latin Cross arrangement. At the east end of the new section was erected an apse to commemorate the lives of the chapel's patron, Henry Williams Sage, and his wife, Susan Linn Sage.³⁵

The exterior elevations continued in most respects the design of the surviving west and south elevations of 1873. Rose windows were built in each gable of the transepts and contained identical tracery designs and stained glass lights. Rectangular art glass windows were placed in the side faces of the memorial apse.

In the interior of the 1898-99 section, open-work transverse and diagonal trusses were employed to support the chapel roofs that converged at the two "crossings" created by construction of the north and south transepts. To provide unobstructed views of the chancel area from the transepts, single cast-iron columns were placed on the north and south sides of the crossings, to absorb the central thrusts of the trusses above. Mosaic panels of varied colors were fashioned on the lower wall and ceiling of the Sage memorial apse.³⁶

1903-5 addition and re-decoration of main chapel:

In 1903, William H. Sage, the second son of Henry W. Sage, donated funds to extend the northeast transept of 1898 in order to provide space for a choir of one hundred singers, an orchestra of twelve pieces, and a new loft for the 1873 organ. Under the plans prepared by Charles Babcock, the north wall of the northeast transept was removed, and a new red-brick transept carrying out most of the 1898 details was erected to the north, providing an additional floor space of 1024 square feet.³⁷ The north elevation of the 1903 addition contained the 1898 rose window and a row of five niches with canopies intended to hold statues of Christ and four apostles. A sixth niche

³⁵Ibid., pp. 7; 11.

³⁶Ibid., pp. 7; 11-14.

³⁷Northup, op. cit., p. 8.

was placed at the north end of the east elevation of the addition to receive the likeness of Guido d'Arezzo. Statues were never placed in the niches.³⁸

In the interior, the organ was rebuilt in a loft at the north end of the addition. A platform south of the organ loft provided space for the choir risers, organ console, and orchestra.³⁹ A porch erected at the west end of the organ loft contained a stairway leading down to a basement passage below the loft and choir platform, intended for assembly of the singers and musicians. In the main chapel, carved, solid oak doors were placed at all of the entries to the sanctuary from porch vestibules. Seven large brass "electroliers" were hung in the main chapel.⁴⁰

The interior decoration firm of Cottier & Company of New York prepared and executed the redecoration scheme carried out in the main chapel between 1903 and 1905. Terrazzo floors with mosaic borders were constructed in the aisles, and the large mosaic panel in the floor of the chancel was laid. A polychromatic design was painted on canvas affixed to the walls above the wainscoting, and a vivid multi-colored scheme was painted on the trusses and ceiling panels of the roof.⁴¹

1940 addition: In 1940, the Board of Trustees accepted the recommendation of the university's Committee on Buildings and Grounds and Architectural Advisory Council that the nave of the main chapel be extended some thirty feet west. The addition, carried out in 1940, provided space for a new organ loft, choir risers, and organ consoles. Acoustical experts had suggested that better acoustical effects

³⁸See plan of the 1903 chapel, Sage Chapel drawings collection, Cornell Facilities and Engineering, reproduced in Supplemental Materials section.

³⁹Northup, op. cit., p. 8.

⁴⁰Ibid., p. 8; 1903 floor plan, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

⁴¹Northup, op. cit., pp. 8-11.

would be obtained by placing the choir and organ at the west end of the nave. Fifteen percent more space for congregants, who had been crowding the chapel in its previous configuration, became available in the 1903 transept, in which pews were placed after removal of the choir and orchestra platform and the organ loft.

The addition was constructed of red brick on a reinforced concrete foundation. Details of the 1873 exterior and the 1903-5 interior were copied in the north and south elevations, with some exceptions (see Description of the Exterior). The rose window in the 1873-75 west elevation, known as the Apostles' Window, was moved to the new west elevation. A full basement below the 1940 addition provided expanded quarters for the choir, which had outgrown the basement rooms below the 1903 organ loft.⁴²

B. Historical Context:

Sage Chapel is named after Henry W. Sage, an Ithacan who made his fortune in the lumber business and who was greatly impressed with the personal and financial sacrifices made by Ezra Cornell and President Andrew Dickson White in establishing the new university. In August 1872, Sage gave over \$200,000 for the construction of the Sage College for Women.

Clark S. Northup, author of a 1904 monograph on Sage Chapel, recounted the story of Susan Linn Sage, wife of Henry W. Sage, remarking in 1872 upon the absence of a separate ecclesiastical building for religious services on the campus. The day after his wife made her comment, Henry Sage visited the first university president, Andrew Dickson White, and offered to donate sufficient funds to erect a chapel.⁴³ White, mindful of the stipulation in the charter of Cornell that it be an "unsectarian" institution, accepted Sage's gift on condition that no religious sect dominate services held in the chapel and that

⁴²[W. P.], "Expand Sage Chapel Facilities," op. cit., p. 483.

⁴³Northup, op. cit., p. 6.

students ". . . be attracted, but not coerced into it."⁴⁴

Charles Babcock, who had just completed the designs for the Sage College for Women, submitted plans for the new chapel in December 1872. The stone chapel was to be ell-shaped in plan. The six bay nave was to house the main chapel, and a long transept arm on the south was to contain a smaller chapel. A tower stood at the intersection. However, the estimates for the construction of the building were too high and Babcock was asked to redesign the chapel along less expensive lines. Babcock simplified the plans and called for the building to be clad in red brick.

Soon after the decision to erect a chapel was made, Dean Sage, eldest son of Henry and Susan Sage, offered to establish an endowment to support a university chaplain selected from the ranks of the Episcopal clergy. White accepted the endowment, but again with several provisos. He told the younger Sage that the non-sectarian nature of the university would preclude giving preference to a single religious denomination and added his personal belief that students rapidly tired of the preaching of a chaplain. Instead, White proposed a preachership, in which income from the endowment would be used to attract leading preachers from all sects.⁴⁵ The president later explained the rationale for his idea:

. . . I felt that leading men coming from week to week from the outside world would be taken at the value which the outside world puts upon them, and that they would bring in a fresh atmosphere.⁴⁶

Dean Sage agreed to the idea, and the Sage Preachership was established.

White invited speakers for the Sunday services from ". . . the whole gamut of belief, from the Roman Catholic bishop of the diocese to the most advanced Protestant." Although the Catholic bishop declined

⁴⁴White, op. cit., p. 402.

⁴⁵White, op. cit., pp. 402-4.

⁴⁶Ibid., p. 404.

to speak, eminent clergymen from a wide range of other Christian denominations accepted the president's invitation. Phillips Brooks, rector of Trinity Episcopal Church in Boston and one of the leading Episcopal preachers of the day, inaugurated services in the chapel in 1875.⁴⁷ During the 1875 to 1876 academic year, he was followed by clergymen from the Presbyterian, Congregational, Baptist, Methodist, Unitarian, Episcopal, and Universalist Churches. Among the preachers in the spring of 1876 was Henry Ward Beecher, one of the most well-known Congregational preachers of the post-Civil War period and pastor of the Sage family's church in Brooklyn, New York.⁴⁸

The Sage Preachership created one of the first nonsectarian university pulpits in the United States. In the 1860's, when most private universities in the nation were associated with Christian denominations, the "unsectarian" character of Cornell had been unusual and attacked by some church leaders and educators as "godless." The erection of Sage Chapel countered the charges of irreligiousness, but President White later observed that the practice of inviting preachers from all manner of sects led to new accusations of "indifferentism." Later, other leading academic institutions adopted the system inaugurated at Cornell. By 1905, when White published his autobiography, he was able to assert that the multiple denominational preachership was ". . . evidently on its way to . . . [becoming] the prevailing system among all of . . . [the leading universities]."⁴⁹

During the twentieth century, the range of Sage Preachers has become still broader. During the 1940-41 academic year, the presidents of several universities, prominent theologians, and the rabbi

⁴⁷Ibid., pp. 403-4; Northup, op. cit., p. 7.

⁴⁸Handwritten list of preachers in Sage Chapel, 1875 to 1876, in file "Sage Chapel" [lists of preachers, 1875-89; 1940's], Department of Manuscripts and University Archives, Cornell; Morris Bishop, A History of Cornell (Ithaca: Cornell University Press, 1962), pp. 182; 216.

⁴⁹White, op. cit., p. 404.

of a leading Chicago synagogue delivered messages at the chapel, as well as well-known preachers from the denominations represented in the 1870s.⁵⁰ The tradition of inviting a wide range of viewpoints has continued since 1940, bringing such influential religious speakers as Harry Emerson Fosdick, Reinhold Niebuhr, Paul Tillich and civil rights leader Martin Luther King, Jr. to the Sage pulpit.⁵¹

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Sage Chapel is of architectural interest as a synthesis of many of the ideas that influenced the design of American churches and chapels of the 1860s through the 1880s. Charles Babcock, architect of all but the 1940 section of the building, was trained in the office of Richard Upjohn, who drew on the designs of English ecclesiastical and domestic buildings dating from the 13th to 16th centuries for much of his own church designs during the 1840s and 1850s. The 1873-75 Sage Chapel showed the influence of Upjohn in the open hammerbeam trusswork of the interior, the ventilation roof gables, and the openwork of the tower spire.

In addition, through Upjohn and his own reading, Babcock absorbed ideas of the influential English architect of the 1830s and 1840s, A. W. N. Pugin, who advocated using parish churches of the 13th and 14th centuries as models for churches in the 19th century. From Pugin and Upjohn came the entry porches, buttresses, and lancet windows of the 1873-75 and 1898-99 sections of Sage Chapel.

As a High Churchman and Episcopal priest, Babcock was also influenced by the English Ecclesiologists, who, beginning in the 1840s, sought to purify Anglican church design from centuries of Protestant

⁵⁰"Sage Chapel Preachers. 1940-41," typescript list in file, "Sage Chapel" [list of preachers], op. cit.

⁵¹"Sage Chapel, Cornell University, Ithaca, New York," [brochure prepared by Cornell United Religious Work, n. d.], distributed in Sage Chapel, p. [3].

intrusions. Like Pugin, the Ecclesiologists looked upon the 13th and 14th centuries as the proper source for modern ecclesiastical design. Beginning with the model church commission they gave to William Butterfield at All Saints, Margaret Street, in London (1850-59), the Ecclesiologists endorsed new materials and colors for their liturgically pure edifices. Exposed brick construction, permanent polychromy, and vibrant colored surface finishes all were merged with medieval plans and details in the designs of Butterfield and his contemporaries George E. Street, James Brooks, and William Burges. The influence of the work of these High Church architects of the 1850s and 1860s may be seen at Sage Chapel in the use of exposed brick, constructional polychromy, and in the design of specific details of the interior, such as the Sage Pulpit of 1903.

A third influence on Babcock's design for Sage Chapel may be found in the writings and published plates of the English art critic John Ruskin, whose Seven Lamps of Architecture and Stones of Venice influenced American architects in the design of both ecclesiastical and institutional buildings of the 1860s and 1870s. In addition to the plates in Ruskin's books, the design by Deane and Woodward for the Oxford University Museum (1855-60) undoubtedly influenced Babcock. The Oxford building had been undertaken with the advice of Ruskin, and its main elevation and detailing had already served as a source for Babcock's design of Sage College at Cornell. In the 1873-75 Sage Chapel, Ruskin's advocacy of constructive coloration and Venetian, or Lombard, Gothic details, such as foliate capitals and arcades supported by attenuated columns are seen in the use of polychromy, the arcade of triple windows in the nave elevations, and the columns and capitals executed by sculptor Robert Richardson.

In the Memorial Chapel, designed in 1882, Babcock drew from contemporary interest in the 13th century Gothic cathedrals of the Isle de France region in France and in the mansions being designed by such architects as Richard Morris Hunt and George B. Post in New York City during the early 1880s. These American architects drew in turn from 16th century chateaux of the French Loire Valley. The fenestration, buttresses, and tabernacles of the exterior and the ribbed vaults in the interior appear inspired by the French cathedrals, while the

pyramidal roof and original cresting and finials owe inspiration to the New York designs. Babcock harmonized the different details and silhouette of the Memorial Chapel and the English-derived design of the main chapel by employing red brick, a similar constructive polychromy pattern, and similar buttresses in the memorial edifice.

In the additions to the main chapel erected in 1898-99 and 1903, the architect returned to the design of 1873 for materials and details. Rose windows resembling the western Apostles' Window and lancets and porches patterned after those of the 1873 elevation were employed in the north and south elevations of the four transepts. The niches of the north and east elevations of the 1903 transept feature details and materials already used in the Memorial Chapel to the west. In the interior, the Sage Apse of 1898-99 illustrates the contemporary interest in Byzantine art and architecture, with its mosaic processional and ceiling panels, as do the aisle and chancel mosaic floors installed in 1903. The vibrant colors and symbols painted on the walls and ceilings of the main chapel recall the aesthetic tastes in High Church interior decoration at the turn of the century.

The 1940 addition to the west end of the nave demonstrates an unusual regard in the 20th century for harmonizing an extension to a building with architectural precedents set in the 19th century. Although the new section was erected on a reinforced concrete foundation and omitted minor details of the 1873 nave, it is in many respects indistinguishable from the 19th century section to the east.

Sage Chapel is an unusual representation in one building of most of the major architectural currents affecting American ecclesiastical design during the period 1860 to 1900. The four additions made to the nave after 1880 also demonstrate a remarkable concern for continuity of architectural design, of assuring that additions made over time contributed to a feeling of unity and harmony.

2. Condition of fabric: All sections of the chapel appear to be in good repair. Comments on each section follow:

1873-75 section. Ivy has grown up over the eaves and gutters from the wall of the north elevation,

allowing precipitation to drain onto several buttresses and resulting in erosion of mortar and growth of moss on stone and brick surfaces. Spalling has occurred on the sandstone steps of the south entry to this section.

1882-84 Memorial Chapel: Ivy has grown over much of the north elevation, obscuring details and indicating future problems with mortar.

1898-99 section: Some ivy is growing on the west wall of the northwest transept. On the south elevation of the section, minor erosion of mortar is noticeable, but additional loss of mortar has been avoided by installation of a circa 1960's galvanized metal guttering system.

1903-5 section: The principal future difficulty lies in the heavy growth of ivy completely obscuring the niches and canopies of the north elevation.

1940 section: A thick growth of ivy covers all but the apex of the west elevation.

B. Description of Exterior:

1. Over-all dimensions: As redesigned in 1898, Sage Chapel had a Latin Cross plan, formed by the nave to the west and the four transepts to the east, expanding the body of the sanctuary to the north and south. The memorial chapel was a separate appendage to the north, connected to the main building only by a passage. The symmetrical arrangement of 1898 was discarded in 1903, when the northeast transept was extended north. In 1940, the length of the nave west of the transepts was nearly doubled in length.

Counting all intervening spaces between buttresses as bays, there are six bays in both the south and north elevations of the present nave. The south elevation of the 1898 transepts has ten bays, while the north elevation of the northwest transept has five. The north elevation of the 1903 northeast transept is five bays wide. The 1898 transepts extend two bays north and south of the nave, and the 1903 transept continues three bays beyond the 1898 wall. In the east elevation of the 1898 section, two entries form bays on either side of the Sage Apse, which contains five bays.

The chapel is one and one-half stories high throughout, with a full basement running beneath the 1940 addition and most of the 1873 nave.

The present chapel is 166 feet long, from the west end of the nave to the east wall of the apse and 115 feet wide from the north end of the northeast transept to the south end of the southeast transept. The nave is approximately 32 feet wide and the space between the northwest and southwest transepts is about 64 feet wide. The chapel is 35 feet high at the ridge of the nave roof.⁵²

Dimensions of each section of the chapel follow:

1873-75 section: The portion of the nave surviving from 1873 measures in the interior roughly 32 feet across by 40 feet long.⁵³

1882-84 section: The interior dimensions of the chapel proper are 20 feet across by 32 feet long.⁵⁴

1898-99 section: The roughly square addition made in 1898-99 was 68 feet (north-south) by 69 feet (east-west), providing a floor area of 4,224 square feet. The Sage Memorial Apse at the east end of the 1898 section measures 15 feet deep and 31 feet across in its interior.⁵⁵

⁵²Figures compiled by A. Robert Jaeger in a documentation report on Sage Chapel, c. 1982, in the files of Historic Ithaca, Inc.; Charles Babcock, Architect, "Ground Plan of the Sage Chapel of Cornell University, Ithaca, N. Y., February 20th, 1903," in Sage Chapel drawings collection, Cornell Department of Facilities and Engineering, reproduced in Supplemental Material section.

⁵³Charles Babcock, Architect, "Ground Plan of the Sage Chapel of Cornell University, Ithaca, N. Y.," February 20, 1903, Sage Chapel drawings collection, Department of Facilities and Engineering, reproduced in Supplemental Materials section.

⁵⁴Ibid.

⁵⁵See Charles Babcock, Architect, "Plan, above window sills, of Addition to the Chapel of Cornell University, Ithaca, N. Y.," February 1, 1898;

1903-5 section: The interior dimensions of the extension made to the northeast transept in 1903 are 32 feet by 32 feet.⁵⁶

1940 section: The addition to the west end of the 1873 nave measures approximately 32 feet across and 28 feet long in the interior.⁵⁷

2. Foundations: The foundations of the 1873 section and all additions except that of 1940 are composed of the same material, treated in the same manner, and have similar dimensions. The foundations of the pre-1940 chapel are of rock-faced gray sandstone, laid in regular courses and rising two to four feet above grade. A water table of the same stone runs along the top of the foundation. It is machine-cut and scored and slants outward from the face of the brick walls above. The foundation is approximately two and one-half feet thick in the pre-1940 sections.

The foundation of the 1940 addition is of reinforced concrete, also approximately two and one-half feet thick, and below grade except for an exposed portion in the west elevation.

3. Walls:

1873-75 section: Red face bricks with an orange tint are laid in running bond. The lime mortar is colored to match the brick. Polychromy is employed through the use of yellow sandstone stringcourses running below the window sills, the high water table and foundation of gray sandstone, and the use of

Charles Babcock, "Ground Plan, February 20, 1903," in Sage Chapel drawings collection, Department of Facilities and Engineering, Cornell; Northup, op. cit., p. 11.

⁵⁶Charles Babcock, Architect, "Ground Plan of the Sage Chapel of Cornell University, Ithaca, N. Y.," February 20th, 1903, in Sage Chapel drawings collection, Facilities and Engineering.

⁵⁷Cornell University Department of Buildings and Grounds, "Sage Chapel First Floor Plan," December, 1940, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

black-glazed brick in parallel courses linking the springing point of the window arches and the window sills. A course of black voussoirs also appears above each window arch.⁵⁸ Buff bricks are used as voussoirs also.

1882-84 Memorial Chapel: The walls of the Memorial Chapel are constructed of face brick of the same tint as the 1873 section, but running bond is employed only above the stringcourse. Common bond appears below. Polychromy occurs in each elevation of the Memorial Chapel through use of the gray sandstone foundation, water table, and buttress steps and a yellow sandstone stringcourse. Molded buff-colored bricks with cylindrical edges alternate with red bricks as voussoirs, providing varied color in each window arch. Reddish-orange terra cotta is employed in the cornice frieze and impost blocks of the windows.

1898-99 section: The 1898 elevations replicate most of the materials and details of 1873, including brick treatment, use of stringcourses, etcetera. The stringcourses and buttress steps are of gray sandstone. As in 1873, the brick is laid entirely in running bond. Black, glazed bricks are employed in the same parallel courses and voussoir courses as the current 1873 walls, and buff courses are used as voussoirs around each rose window in the 1898 transepts, as well as in parallel courses in the gables.

1903-5 section: In the 1903-5 transept, yellow sandstone stringcourses and buttress steps are found on the east and west elevations. Otherwise, the same materials and polychromatic scheme were employed by Babcock as with the 1898-99 elevations.⁵⁹

1940 section: Red bricks approximating the hue of the 1873 section to the east were employed for the walls of the 1940 addition, but without the black glazing, sandstone stringcourses, water tables, and

⁵⁸The black glazing, created by dipping red bricks in tar, has worn off many of the brick courses on which the material was applied, in the 1898-99 sections as well as in the 1873-75 nave.

⁵⁹Compare HABS Photographs 1 and 3.

buff brick. The brick was laid in running bond, but with white-colored Portland cement used as a mortar. Red brick was used entirely in the west elevation as voussoirs for the Apostles' Window.

4. Structural system, framing:

1873-75 section: Masonry, load-bearing walls support a wooden frame gable roof, supported in the interior by a system of hammerbeam trusses. The floor structure of the 1873 section of the nave is wood frame, composed of joists supported in the basement by cast iron or steel columns and I-beams at center and by the masonry foundation walls on the outside.

1882-84 section: The structure of the 1882-84 Memorial Chapel is of fire-proof construction. In the chapel proper, masonry load-bearing walls support two cells of masonry-ribbed vaults, the thrusts from which are sustained by regular stepped buttresses at the center of the east and west elevations and by diagonal buttresses at each of the four corners of the Memorial Chapel. The floor of the chapel is of tile construction, supported below by parallel brick tunnel vaults resting on wrought iron or steel I-beams.

A wood frame, pyramidal roof surmounts the Memorial Chapel. The structure is composed of rafters and tie beams, forming an acute triangle in section. The passage connecting the Memorial Chapel to the 1873 section of the main building is covered by an arched, masonry tunnel vault. The vault supports the wooden rafters of the gable roof above.⁶⁰

1898-99 section: The walls of the 1898-99 addition to Sage Chapel are load-bearing masonry. The roof structure consists of five sections. Gable roofs cover the four transepts and are supported by hammerbeam trusses taken from the demolished section of the 1873 nave. The four transept roofs intersect

⁶⁰See the plans, section drawings by Charles Babcock for "The Memorial Chapel of The Cornell University. Ithaca, N. Y., December 15th., 1882," in Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Material Section.

with an east-west continuation of the nave consisting of two cells. The east-west gable roof above the cells is supported by open-work diagonal trusses springing from stone corbels resting on the masonry piers at the juncture with the 1873 nave and on two piers outside of the archway leading into the Sage Apse to the east. At the center of the 1898 section, the diagonal trusses spring from octagonal wooden blocks forming the architraves of two cast-iron columns.

The trusses are simple, arched braces intersecting at the centers of the two cells in the 1898 nave section. Each intersection of the diagonal trusses supports a system of tie beam, king post, collar beam, and struts, all of which in turn sustains the rafters of the roof. At the four intersections of the transept roofs with the two cells of the eastern nave, transverse trusses, or arched braces, spring from the same outer piers and cast-iron columns as the diagonal timbers. A transverse truss also supports the east-west roof between the cells.

The wooden plates supporting the rafters of the central slopes of the transept roofs are carried within the chapel by arched braces springing from corbels in the outer transept walls and from the architraves of the two iron columns. In the Sage Apse, arched braces support the cells of the wooden roof and spring from stone columns that rest on corbels and are located at the juncture between each facet of the apse.⁶¹

The floor structure of the 1898-99 section is wood frame. The joists are supported by the outer foundations, steel I-beams resting in turn on brick piers in the basement, and stone foundation footings apparently surviving from the 1873-75 chapel.

1903-5 section: Load-bearing masonry walls support a wood frame, gable roof that is the continuation of the 1898 northeast transept. The 1903 roof is

⁶¹See Charles Babcock, Architect, "Plan, Above Window Sills, of Addition to the Chapel of Cornell University, Ithaca, N. Y., February 1st, 1898," and Babcock, "Transverse Trusses., February 1st, 1898," both in Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

supported by one of the hammerbeam trusses of the 1873 nave and by three transverse arched braces springing from stone corbels and intersecting at their crowns with king posts and tie beams. The floor structure is the same as that of 1898.

1940 section: What appear from observation and from the 1940 plans to be brick masonry load-bearing walls support a continuation of the wooden-frame gable roof of the 1873 nave. Two hammerbeam trusses replicating the design of those of 1873 support the rafters and purlins of 1940.⁶²

5. Porches:

1873-75 section: The porch adjoining the south elevation of surviving section of the nave remains from the 1873 chapel. The 1873 porch was derived from the prototype used by the influential English architect A. W. N. Pugin in such parish church designs as St. Oswald's, Liverpool (1840-42) and St. Augustine's, Ramsgate, Kent (1846-51) and by William Butterfield in his design for All Saints', Margaret Street, London (1850-59).⁶³ The southwest porch of Sage Chapel in turn served as the prototype for the porches of all the additions that Babcock designed.

Like the English antecedents, the southwest porch projects from the south wall of the nave. The vestibule within the gable-roofed porch measures eight by eight feet. The foundations and walls of the porch are constructed of the same materials as those of the nave, but with several differences in details. The south face of the porch is fashioned in the form of a lancet arch, the stone coping of

⁶²See Cornell University Department of Buildings and Grounds, "Sage Chapel First Floor Plan," December, 1940, in Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Materials section.

⁶³See the mention of St. Oswald's and photograph of All Saints, Margaret Street in Henry-Russell Hitchcock, Architecture: Nineteenth and Twentieth Centuries (Baltimore: Penguin Books, 1977), pp. 151-52; 248, and photograph of Pugin's drawing of St. Augustine's in Roger Dixon and Stefan Muthesius, Victorian Architecture (New York: Oxford University Press, 1978), p. 191.

which projects above the porch roof. A yellow sandstone stringcourse, carved with a chevron pattern, runs along the side elevations below the side windows and terminates at the impost blocks of the porch entry. The facade proper provides a setting for the entry to the vestibule. Permanent polychromy is employed, with buff and red brick voussoir courses alternating above the pointed entry arch and black-glazed brick courses lining the perimeter of the inner voussoirs. Like the demolished west and east gables of the 1873 chapel, the porch gable is accented by periodic yellow sandstone blocks set in the brick within the descending edges of the coping.

Flanking the outer entry are two brownstone columns with capitals carved by Robert Richardson into foliage derived from John Ruskin's plates in The Seven Lamps of Architecture and previously used by Babcock in the entry and fenestration of Sage College. The capitals are of yellow sandstone; the smooth shafts of the columns rest on octagonal sandstone "drop pedestals."

1882-84 section: There are no porches.

1898 section: Three of the four porches constructed for the 1898-99 addition survive: those at the center of the southwest, northeast, and southwest transepts. The design of each was derived by Babcock from that of the 1873 porches, with little change. The principal differences include a smooth yellow sandstone stringcourse, without the 1873 chevron carving; capitals on the entry columns that resemble the scale and detail of a Classical Corinthian capital more than the attenuated capital of 1873; square pedestals supporting the entry columns, rather than the drop pedestals of 1873; gray sandstone coping on the porch gables and inwardly-projecting blocks along the coping; and an absence of black-glazed courses along the side elevations.⁶⁴ Faded black courses line the voussoirs of the entry arches.

On either side of the Sage Memorial Apse there is a porch with an interior dimension of eight by nine feet, slightly larger than the porches of the

⁶⁴This may be merely due to erasure by weathering.

transept elevations. The porches of the east elevation, the one to the south intended to serve as a vestry and one to the north apparently as a vestibule for entry, follow the design of the transept porches in all respects except size and the single entry doors.⁶⁵

1903-5 section: A single porch with the interior dimension of eight by eight feet adjoins the north end of the west elevation of the addition made in 1903. Originally the porch served as an entry to a stairway leading to the basement quarters of the Sage Chapel choir.⁶⁶ In its exterior design, it follows the 1898 porches in all details except for the entry capitals, which are more overtly Corinthian in the details of their volutes and acanthus leaves, and in the absence of any black glazed courses, either along the sides or lining the voussoirs of the entry arch.

1940 section: There are no porches in the 1940 section.

6. Chimneys: There are no chimneys.
7. Openings:
 - a. Doorways and doors:

1873-75 section: Within the brick archway of the surviving southwest porch, there is an arched, wooden tympanum with a smooth surface over rectangular double doors. The wooden entry doors, probably 20th century replacements of the originals, replicate the chamfered rails, stiles, and diagonal battens of the lower panels of the 1873 doors. Above, there are plain panels without battens.

1882-84 section: There is a doorway in both the east and west elevations of the passage leading from the main chapel to the 1882-84 Memorial Chapel. In each of the two elevations, a

⁶⁵See Charles Babcock, Architect, "Ground Plan of the Sage Chapel of Cornell University, Ithaca, N. Y., February 20th, 1903," Sage Chapel drawings collection, Facilities and Engineering.

⁶⁶Babcock, "Ground Plan . . . 1903," op. cit.

stringcourse of brownstone across the upper wall forms the lintel for the doorway. At the two upper corners of the doorway, yellow sandstone blocks support the stringcourse as the latter crosses the doorway. The inner portion of each block is carved, probably by stone carver Robert Richardson, in a foliated design terminating in volutes. There are sandstone sills below each doorway. The double doors in both elevations are apparently original, and have the same design as that of the 1873 entry. The upper panels of the doors are now covered with sheet metal.

1898-99 section: The doorways and doors of the three surviving porches on the north and south elevations of the 1898 transepts are identical in design to the 1873 doorway. There have been a few changes made since 1899. A terra cotta bas relief sculpture of Christ donated in 1899 by Charles Babcock was placed in the tympanum of the southeast doorway in 1903.⁶⁷ The white figure of Christ's head and shoulders appears against a yellow ceramic field, while a polychromatic garland lines the perimeter of the relief. In the northwest doorway, the plain wooden upper panels have been replaced in the twentieth century with safety glass. In the two eastern porches, leading to the vestry and custodian's office, the design of 1873 continues, but with single doors, rather than double.

1903-5 section: The doorway and door of the 1903 porch differ from those of 1898-99 in several respects. A single door leads inward, and the tympanum carries a terra cotta bas relief sculpture of an angel symbolizing Worship, said by Clark Northup to have been executed "after the School of Della Robbia."⁶⁸ The figure of the angel is white, and it appears against a ceramic field of blue. A circular wooden arc carrying rosettes enframes the figure. The door, which probably had a single panel originally, now has four lights.

⁶⁷Northup, op. cit., p. 18.

⁶⁸Ibid.

1940 section: At the west end of the south elevation, a sunken doorway provides entry to the basement of the 1940 section. A concrete stairwell leads down to the steel door, which has a single light with safety glass in its upper portion and plain panel below.

b. Windows:

1873 section: In the 1873 chapel, Babcock followed A. W. N. Pugin's lead with windows, as well as with porches. Just as Pugin and disciples such as George E. Street had employed lancet windows derived from English parish churches of the 13th and 14th centuries for their own church commissions,⁶⁹ Babcock used lancets for the north and south elevations of the Sage Chapel nave.

In the surviving south elevation of the 1873 nave, a single lancet appears to the west of the 1873 porch, and a trio of lancets to the east of the entry. For each opening, there are two brick arches--an inner one holding the window and an outer one flush with the wall of the elevation. The inner arch consists of a single red brick course; the outer arch of buff brick voussoirs. A single black-glazed brick voussoir course outlines the buff bricks. Two black brick courses separated by a single red brick course intersect with the springing points of the outer arch. Three black courses run across the bases of the outer arches immediately above the brownstone window sills. The downwardly slanting sills are machine cut and scored and rest on the yellow sandstone stringcourse of the elevation.

The fenestration of the north elevation of the 1873 nave is identical to that of the south, although the trio of windows on the north were installed in the early 1890s.⁷⁰

⁶⁹For example, Pugin used lancet windows in St. Oswald's, Old Swan, Liverpool (1840-42) and Street in St. Mary's Par, Cornwall (1847). See Dixon and Muthesius, op. cit., pp. 190; 200.

⁷⁰See explanation in "Alterations and Additions."

1882-84 section: There are five windows in the Memorial Chapel: two in the west elevation, two in the east, and one in the north elevation. Although Clark Northup described the style of the Memorial Chapel to be of "the middle French pointed school" (i. e., 13th century),⁷² the tracery of the windows was drawn more from 13th century English antecedents, either directly from such medieval cathedrals as Lincoln Minster (c. 1260) or indirectly from 19th century English designs, such as that of A. W. N. Pugin for St. Giles, Cheadle, Staffordshire (1841-46)."⁷³

⁷²See Northup, op. cit., p. 15.

⁷³See plate of east elevation of Angel Choir at Lincoln Minster in Geoffrey Scott, Architecture in Britain: The Middle Ages (Baltimore: Penguin Books, 1956), plate 108, and Dixon and Muthesius, op. cit., p. 190.

Pointed brick arches enframe each window. A monochromatic brick inner arch holds the tracery, while alternating groups of red and buff brick voussoirs make up the outer arches. Along the perimeter of each outer arch is a course of black glazed brick headers. Alternate bricks in the inner arch are molded and have cylindrical elements at the corners, contrasting with the rectilinear quality of the rest of the archway.

The archways rest upon sandstone impost blocks carved with squared tops and ovolo moldings supported by upraised, acanthus-like leaves. Rectangular, smooth-faced brick piers support the impost blocks and rest in turn on plain, machine-scored, stone pedestals. The gray sandstone window sills and pier bases rest on the stringcourse of the Memorial Chapel. Above each window archway there is a gable projecting four to five feet above the cornice of the roof, much in the manner of gables in the choir at Amiens, the cathedral erected in the Isle de France region of France in the 13th century. Each gable is lined by a stone coping that terminates in a finial at its apex and in varied sculptural motifs at the two lower termini of the coping, including male and female heads (southeast window); foliage (northeast window); and grapes (northwest and southwest windows).⁷³

In the tympanum of each window gable is a circular sandstone panel, in which is carved a trefoil device. Yellow sandstone tracery contains the lights of each window. In each, the formula begun in the 13th century Isle de France cathedrals of Rheims and Amiens and continued in such English cathedrals as Lincoln Minster was employed by Babcock: three lancets with cusped heads are surmounted by two trefoils and a culminating circle.⁷⁴

⁷³The lower portions of the coping in the north window are obscured by ivy.

⁷⁴See Charles Babcock, "The Memorial Chapel of The Cornell University, December 15th, 1882," north and west elevation drawings, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Material section.

1898-99 section: In each of the three surviving transept elevations of 1898, pairs of lancets derived from the trio in the 1873 nave flank the central porch. The black-glazed courses, which originally linked the lancets of each transept and outlined the each arch, have lost most of their tar surface. Otherwise the paired lancets are identical in design to the trio in the south elevation of 1873. Pairs of lancets also appear in the west elevations of the southwest and northwest transepts.

Set in the center of each 1898-99 transept gable is a large rose window. Each window is set in a circular arch composed of an inner course of buff brick headers, followed by outer arches of red brick voussoirs, then red brick headers, originally glazed black. The tracery pattern is the same in all four 1898 rose windows⁷⁵: Yellow sandstone tracery forms an eight-leaved device at center, surrounded by eight quatrefoils set in circles. Cusping is used throughout. Such rose windows in the late 19th century ultimately derived from the great rose windows constructed in the west elevations and transept gables of Isle de France cathedrals of the 13th century. Babcock may also have drawn inspiration from contemporary English and American ecclesiastical designs, many of which included rose windows by the 1890s.

In the Sage Memorial Apse, the yellow sandstone tracery of the main window in the east facet dates from 1873 and was located in the chancel wall of the original building, above the speaking platform. The brick arch above the window, piers and capitals at the sides, sills below, and projecting gable above the whole closely follow the design Babcock employed for the windows of the Memorial Chapel. The tracery itself consists of four lancets with cusped heads below, surmounted by quatrefoils and circles, and crowned by a six-pointed star. The pattern is similar to that used by the influential High Church architect William Butterfield in the chancel window of All Saints'

⁷⁵The rose window in the northeast 1898 transept was transferred to the north elevation of the 1903 addition in 1903-5.

Church, Babbacombe, Devon, in England (1865-74).⁷⁶

In the northeast and southeast facets of the apse, there are paired rectangular windows. Squared yellow sandstone lintels with chamfered corners appear above each pair and are supported between the windows by a sandstone column with a Corinthian capital and stop pedestal. Below, two yellow sandstone blocks form sills for the paired windows. Single rectangular windows with similar lintels and sills appear in the north and south facets of the building. Simple rectangular windows appear in the side elevations of all five porches of the 1898 section of the chapel.

1903-5 section: In both the east and west elevations of the 1903 addition, there are three lancet windows in which the 1873 and 1898 design is continued. Beginning at the southern end of the addition, there is a pair of lancets, then a single one in each of the side elevations. In the gable of the north elevation of 1903, the rose window of the 1898 northeast transept appears, set in a brick arch of 1903-5.

1940 section: Single lancet windows appear directly west of the 1873 nave in the north and south elevations of the 1940 extension to the nave. The design is simplified from that of 1873. An inner arch of red brick headers holds the window frame, while an outer arch consists of red brick stretcher voussoirs, followed by red headers. No polychromy is employed. A sandstone sill resembling that of 1873 appears below the windows, but the lights themselves are shorter than the older windows to the east: a wooden panel is found in place of glass above the sill.

The west elevation contains the large rose Apostles' Window that originally appeared in the west elevation of 1873. The alternating buff and red brick voussoirs of the 1873 arch were replaced in 1940 with an inner arch of red brick headers and an outer arch of red brick

⁷⁶See photograph in Dixon and Muthesius, op. cit., p. 207.

stretcher-voussoirs, then three courses of red headers. The yellow sandstone tracery is arranged in a rose petal pattern at center much like that of the Rheims Cathedral west window (c. 1241 and after).⁷⁷ There are twelve "petal" lights radiating from a circular light at center. Around the cusped heads of the petals are twelve quatrefoils.

6. Buttresses:

Stepped buttresses had been used in the construction of English parish churches of the 13th and 14th centuries to receive the thrust exerted by the trusswork of the roof within. Beginning in the 1840s, the Cambridge Camden Society of England, a High Church reformist wing of the Anglican Church, began to urge that medieval churches of the 13th and 14th centuries be used as models for contemporary ecclesiastical design. Several American Episcopal congregations followed the counsel of their English brethren in building their churches in the 1840s and 1850s. Of equal influence among English and American architects, A. W. N. Pugin urged that 13th and 14th century designs be used for ecclesiastical commissions. Charles Babcock, both an architect and Episcopal clergyman, used elements of medieval parish church designs for his own commissions.

Consequently, for all the sections of Sage Chapel, he used stepped buttresses similar to those found in St. Michael's Long Stanton, Cambridgeshire (c. 1230), the design of which the Cambridge Camden Society endorsed as a model for contemporary churches, or in Pugin's St. Giles's, Cheadle (1841-46).⁷⁸ In the south and north elevations of the 1873 nave, Babcock placed red brick buttresses between each bay, corresponding to the hammerbeam trusses inside. Each buttress, approximately two feet wide, consists of two stages, each of which is

⁷⁷See Paul Frankl, Gothic Architecture (Baltimore: Penguin Books, 1962), plate 62.

⁷⁸See Phoebe B. Stanton, The Gothic Revival and American Church Architecture: An Episode in Taste, 1840-1856 (Baltimore: Johns Hopkins University Press, 1968), pp. 92-95; Henry-Russell Hitchcock, Architecture: Nineteenth and Twentieth Centuries (Baltimore: Penguin Books, 1977), p. 152.

covered with sandstone slabs with stepped, raking surfaces.

1882-84 section: There is a diagonal, stepped buttress at each of the four corners of the Memorial Chapel. Each of these buttresses is of red brick and has two stages. The upper stage is composed of six gray sandstone slabs forming raking, stepped surfaces, the lowest slab is carved with spherical elements incised with trefoils. The gray sandstone stringcourse of the chapel forms the lower stage of two steps. There are also stepped buttresses at the centers of both the east and west elevations, between the windows. An upper stage of four stone steps appears at the level of the piers in the window archways on either side of the buttresses. The stringcourse provides a second, two-step stage below. The east and west buttresses are crowned by tabernacles with gray sandstone bases, yellow sandstone canopies, and limestone pyramidal roofs decorated with crockets and finials. The Sage Chapel tabernacles resemble those on the buttresses of the nave and facade at the cathedral of Rheims.⁷⁹ The east tabernacle contains a statue of Wisdom, carved from Portland (England) limestone. The canopy is supported by polished pink granite columns resting on a sandstone base. In an identical tabernacle on the west elevation stands a white terra cotta statue of Generosity, who holds a masonry chapel in her left arm and a rod in the right.⁸⁰

1898-99 section: Flanking the southwest, southeast, and northeast corners of the 1898 addition to the main chapel are angle buttresses with graystone steps matching the design of the buttresses along the 1873 nave. At the center of the south elevation of 1898, between the southwest and southeast transepts, is a pair of stepped buttresses continuing the 1873 design. There are no buttresses along the east elevation of 1898.

1903-5 section: There are angle buttresses with yellow sandstone steps at the northeast and

⁷⁹See Figure 247 in Whitney S. Stoddard, Art and Architecture in Medieval France (New York: Icon Editions, 1972).

⁸⁰Northup, op. cit., p. 18.

northwest corners of the 1903 addition. Between the bays of the east elevation are two regular stepped buttresses matching those of 1898, and on the west elevation is one such buttress.

1940 section: Between the bays of both the north and south elevations of the 1940 extension to the nave are two, brick buttresses. The machine-scored limestone steps of the two stages on each buttress continue the design of 1873 immediately to the east. There are angle buttresses at the northwest and southwest corners of the addition.

8. Roof:

- a. Shape, covering: The roofs of all sections of Sage Chapel proper are gable in shape. The roof of the Memorial Chapel is pyramidal.

The original 1873-75 chapel roof was covered with slate of both rectangular and scalloped shapes.⁸¹ Apparently, in 1898-99, the slate on the 1873-75 nave was replaced with rectangular slate pieces matching those on the new transepts. It appears that the south slope of the 1873-75 and 1898-99 sections of the Sage Chapel roof and all of the Memorial Chapel roof are covered with "ribbon" slate, probably from the quarry at Chapman, Pennsylvania. The north slopes of the 1873-75 and 1898-99 sections and all of the 1903-5 and 1940 sections of the chapel roof are apparently covered with "clear black" slate from Lehigh or Northampton Counties in Pennsylvania. The slate on the older sections of the chapel roof is beginning to "marble out, delaminate, and scale."⁸²

Galvanized sheet metal applied within the last twenty-five years covers the ridges of all the

⁸¹See Supplemental Material, Historical Photographs 3, 6.

⁸²Jeffrey S. Levine, an M.A. student in Historic Preservation Planning at Cornell University, supplied the information on the type of slate used. See: Levine, Jeffery S. "An History of the Slate Industry in the United States, 1734-1988." Ithaca, N.Y.: M.A. thesis, Cornell University, 1988.

roofs and comprises the flashing employed in the valleys of the main building. Gray slates of the same source as the 1940 roof have been used to replace original ribbon slate adjacent to the flashing installed in circa 1960s.

Cast-iron finials culminating in crockets appear at the two ends of the roof ridge on the Memorial Chapel. Originally, wrought-iron cresting lined the ridge between the finials. The pyramidal roof, finials, and cresting probably derived from the grand mansions being designed in the early 1880s by Richard Morris Hunt and others in New York City. In roof details, the mansions derived in turn from 16th century chateaux of the French Loire Valley and from institutional architecture erected in Paris during the Second Empire (1852-70).

b. Cornice, eaves:

1873-75 section: The cornice along the south and north elevations of the surviving 1873 nave is composed of two parallel corbel tables of red brick.⁸³

1882-84 section: The cornice of the Memorial Chapel is composed of a red terra cotta frieze. The bas relief sculpture consists of alternating volutes and acanthus leaves, possibly derived from contemporary designs of the influential Boston architect, H. H. Richardson.⁸⁴

1898-99 section: The side elevations (west and east) of the 1898 transepts continue the double corbel table scheme of the 1873 nave. A single corbel table composes the cornice of the Sage Memorial Apse. The gables of the southwest, southeast, and northwest transepts are lined with gray sandstone coping. On either side of each gable, rectangular yellow or gray sandstone

⁸³See Supplemental Material section, HABS Photograph 9.

⁸⁴See, for example, the photographs of the Crane Library by Richardson in Quincy, Massachusetts (1880-83), in Hitchcock, op. cit., p. 314.

blocks set adjacent to the coping add to the polychromy of the gables.

1903-5 section: The double corbel table scheme of 1873 is continued in the cornice of the east elevation of the 1903 addition. On the west elevation, a single corbel table runs along the cornice, while four courses of stretcher bricks cantilevered from the main wall surface support the plain frieze below the corbels. The gable of the north elevation replicates the coping and accenting blocks of the 1898 transepts.

1940 section: The north and south elevations of the 1940 addition continue the double corbel table scheme of the 1873 nave. The west elevation gable is lined with a stone coping and inwardly-projecting stone blocks.

Gutters: Copper gutters, probably installed in 1940, line the eaves of both the 1940 and 1873 nave elevations. Circa 1960s gutters of galvanized metal have been installed on the eaves of all other sections of the chapel.

Ventilation Gables: Gable-roofed ventilation openings appear near the ridges of the 1873 and 1898 roofs, to provide for release of hot air in the attics at the apexes of the chapel roofs. Wooden louvers cover each opening and are enframed by a lancet arch. A ventilation gable appears on the north and south slopes of the 1873-75 section and on the east slopes of each of the 1898-99 transepts. There are no ventilation openings on the roof of the 1903 or 1940 sections. A small, gable-roofed ventilation opening appears on the east and west slopes of the 1882 Memorial Chapel, probably added after construction.⁸⁵ Babcock may have derived the gable-roofed ventilation openings from the work of Richard Upjohn, his architectural mentor, who used such devices in

⁸⁵The December 1, 1882 drawing of the west elevation of the Memorial Chapel does not show a ventilation gable.

several church designs of the 1840s and 1850s.⁸⁶

9. Miscellaneous ornamental features:

Maltese Cross Panels: On each of the four transept gables of 1898 and 1903, there is a yellow sandstone Greek or Maltese cross just below the apex of the gable. Each cross is a bas-relief sculpture, upraised from a circular sandstone panel, which is lined by a circular stone band flush with the wall surface. The cross motif is modeled on the Maltese cross that appeared in the apex of the 1873 west elevation. There are four horizontal courses of buff bricks located about five red brick courses below each cross panel, complementing the light-colored cross above. In the present west elevation of the chapel, erected in 1940, there is also a Maltese or Greek Cross motif in the apex of the gable, but without the buff brick headers or horizontal courses.

1903-5 Niches and Arcade: According to the February 20, 1903 plans that he drafted for the northeast extension to the chapel, Babcock intended the five niches that appear along the north elevation and the single niche that occurs at the north end of the east elevation to hold statues. None were ever placed in any of the openings. The eastern niche, intended for a statue of Guido d'Arezzo⁸⁷ and recessed about two feet into the wall, has a brownstone sill projecting beyond the east elevation and supported by corbels in the form of double ovolo moldings. Above the niche is a limestone canopy with a gable roof and coping. There is a lancet arch with an ovolo molding along its edge immediately above the niche. The impost blocks of

⁸⁶See, for example, the photograph of Upjohn's Zion Episcopal Church in Rome, New York (1850-51), in Eberhard Upjohn, op. cit., Figure 56.

⁸⁷Northup in 1904 identified Guido d'Arezzo (995-1050) as "the Italian monk who invented the monochord, introduced the four-line staff for writing music with square notes, and is supposed to have originated the modern do re system of musical notation." Northup, op. cit., p. 18.

the arch are carved into upraised acanthus leaves and support the canopy and arch as corbels.

The five niches of the north elevation are found within each of the arches of a blind arcade. The Venetian Gothic arches are composed of alternating plain and molded buff brick voussoirs similar to those employed in the window arches in the memorial chapel to the west. Black-glazed brick headers outline the voussoirs. The Ohio limestone capitals consist of acanthus leaves and volutes. The brick piers supporting each arch rest on torus moldings and bases also carved from Ohio stone. The sills of the arcade are made of Medina limestone. Each niche is two feet deep. Babcock intended for the central niche to hold a statue of Christ, and the flanking niches to contain statues of the four Gospel writers, Saints Matthew, Mark, Luke, and John.⁸⁸

Other ornamental details: There is a cast-iron cross, approximately one and one-half feet high, standing at the intersection of the northeast and southeast transepts with the nave roof.

C. Description of Interior:

1. Floor plans:

Basement: The west sixty feet of the basement, comprising all of the 1940 section and about half of the area below the 1873 section, is fully excavated and devoted to a robing room, offices, and restrooms for the musical ensembles that perform in the chapel. At the northwest corner is a women's restroom, measuring ten feet, eight inches by ten feet, eight inches. South of a women's room is a furnace room measuring eight feet, ten inches by ten feet, eight inches. In the southwest corner is a washroom for the minister and men's restroom. The combined areas of the two rooms equals that of the women's room. The middle section of the 1940 basement, east of the restrooms and furnace and measuring about fifteen by thirty-two feet, is open and used for the robing and assembling of the choral groups. The third section, to the east, measuring

⁸⁸See Babcock's ground plan, east and west elevation drawings, and detail drawing of the north niches, all dated February 20, 1903, in Sage Chapel drawings collection, Facilities and Engineering.

about twenty by thirty-two feet, consists of an east-west corridor at center, flanked to the north and south by offices for the Cornell Glee Club, Sage Chapel Choir, and other ensembles.

The central corridor proceeds along the east-west axis of the chapel above, to the western foundation wall of the Sage Apse. It then turns north and follows the east wall of the 1898 and 1903 sections to the north foundation wall of the 1903 addition. A single-flight stairway leads west, up to the northeast transept. Except for the corridor, the eastern portion of the 1873 nave and all of the 1898 section are unexcavated, with four to five foot high crawl spaces providing access to the chapel floor, plumbing, etcetera. The area below the 1903 addition originally contained the robing and assembly rooms of the Sage Chapel Choir. Only the eastern corridor is in current use.⁸⁹

The basement of the 1882-84 Memorial Chapel is a burial crypt. According to Babcock's 1882 plans and elevations, three tiers of vaults, seven abreast, were to be erected along the south wall of the crypt, providing space for twenty-one bodies. A like number of vaults were sketched on the plans along the north wall, indicating where additional burials could occur. Access to the crypt is through a slab at the center of the floor of the Memorial Chapel above. A tunnel-vaulted room below the passage between the main chapel and the memorial edifice is also shown in the 1882 plans.⁹⁰

First Floor: In the present main floor of Sage Chapel, there are two major axes and nine minor ones. The principal east-west axis runs along the central aisle of the nave below the ridge line of

⁸⁹See Cornell University Department of Buildings and Grounds, "Sage Chapel Basement Floor Plan," December, 1940, Sage Chapel drawings collection, Facilities and Engineering, reproduced in Supplemental Material section.

⁹⁰See Babcock's basement plan, longitudinal section, and section of porch (passage) for the memorial chapel, all dated December 15, 1882, in Sage Chapel drawings collection, Facilities and Engineering. Copies also in Supplemental Material section.

the nave roof, from the precentor of the choir loft on the west to the chancel rail of the apse. The principal north-south axis runs along a cross aisle from the entry to the southwest 1898 transept to the entry of the northwest transept, intersecting with the central aisle. There are four east-west minor axes, running along side aisles parallel to the central aisle, and five north-south minor axes. One of the latter runs along a cross aisle following the ridge line of the southeast and northeast transepts, but is interrupted by the two central sections of pews.⁹¹ A second north-south axis follows an aisle running from the south entry to the 1873 section to the entry for the memorial chapel. Other minor north-south axes run along the east and west walls of the 1898 and 1903 transepts.

The westernmost twelve feet of the 1940 section is occupied by the organ loft. The next approximately thirty feet of the nave east of the organ is occupied by the choir loft, organ console, and precentor.

In the nave and transepts, between the east-west and north-south aisles already described, there are sections of pews: four sections in the nave proper, five sections in the 1898 transepts, and two sections in the 1903 addition. In the Memorial Chapel, there are two cells, open at center, with funerary monuments placed along north, east, and west walls.

2. Stairways:

There are two stairways connecting the main floor of the chapel and the basement. The main one, a single flight constructed in 1940, runs along the north wall of the 1903 addition, on an axis with the northwest entry to the 1903 section. Oak tongue and groove paneling conceals the stairs from the chancel area to the south and also lines the north wall of the stairway. The second stairway is located at the northwest corner of the 1940 choir loft, at the west end of the nave. The "box" design resembles the crude rectangular staircases of the American colonial period. An oak panel conceals the stairs from the nave and forms a central north-south wall

⁹¹The intervening pews have been removed recently.

around which the steps turn. At each of the five turns of the stairway, "winders," or wedged-shaped steps are employed.

The Sage Chapel Choir uses the main stairway for their processional from the robing room in the basement to the choir loft. The box stair in the loft provides immediate access to the nave from the choir rooms.⁹²

3. Flooring:

1882-84 Memorial Chapel: The floor of the Memorial Chapel is of polished encaustic tile.⁹³ In both the passage from the main chapel and in the memorial room itself, pentagonal-shaped tiles of alternating beige and dark orange hues are laid in the center of the passage and room. Small black tiles square in shape occur in the intersections of four pentagonal pieces. The borders of the Memorial Chapel are laid with tiles of contrasting pentagonal, triangular, and rectangular shapes. A large rectangular stone slab laid east and west appears at the center of the Memorial Chapel, between the two cells and provides access to the crypt below.

Nave and transepts: The floors beneath the pews of the nave and transepts are wooden, heavily varnished, and deep brown in color. All of the aisles in the 1873-75 nave and 1898-99 transepts are covered with a terrazzo and mosaic surface laid in 1903. The center of each aisle is terrazzo, composed of small pieces of white and yellow marble set in cement and polished. The borders of each aisle consist of a Greek fret pattern, composed of mosaic and white, yellow, green, and black in color.⁹⁴ At the intersections of the east-west and north-south aisles, mosaic crosses with fleur-de-lis terminating each arm are found, laid in the terrazzo. The colors employed in the motifs include green, white, reddish-orange, amber, and black. Larger, foliate designs in mosaic are found on the main north-south aisle, inside the two entries and

⁹²See "Sage Chapel First Floor Plan," December, 1940, in Supplemental Material section.

⁹³Northup, op. cit., p. 15.

⁹⁴Ibid., pp. 8-9.

at the intersection of the aisle and the central east-west axis.

In the chancel floor, there is an eleven foot by thirty-four foot mosaic panel presenting the Biblical allegory of Christ as the Vine and Mankind as the branches. At the center of the scheme, an oval panel appears, containing at center a cross, the arms of which terminate in four crowns. Green vines embrace the oval panel from "roots" at the lectern side of the chancel and from the Sage Memorial Pulpit on the other. To the north of the oval panel is the legend, "I Am the Vine." To the south side is the complementary legend, "Ye Are the Branches."⁹⁵ Clark Northup, writing immediately after completion of the mosaic scheme by Cottier and Company of New York, offered this interpretation of the chancel allegory:

The ornamental scheme of this panel shows Truth, as represented by the True Vine, emanating on the one side from the center of the pulpit and on the other side from its own roots, as growing from its own inspiration
.⁹⁶

The floor of the Sage Apse is of greenish-black marble. In the traditional position of the altar, in front of the east wall of the apse, there are instead three steps of the same marble leading up to the mosaic figure of Philosophy. Directly to the west of the steps, at the center of the apse, are two rectangular slabs, also of black marble, located above the burial vaults of Henry and Susan Sage. On both stones are inscribed the life dates of the deceased.⁹⁷ In the black marble floor at the foot of the two stones are these words, composed of gold mosaic: "In This Apse Erected by the University to His Memory Rests Henry Williams Sage with His Wife Susan Linn Sage."⁹⁸

⁹⁵See Supplemental Material section, HABS Photograph 21.

⁹⁶Northup, op. cit., p. 9.

⁹⁷The present slabs replace the originals of Carrera stone.

⁹⁸Ibid., p. 14.

The aisles of the 1903-5 transept are of terrazzo, composed of amber, white marble pieces set in cement. This surface was laid in 1940, when the 1903 choir and organ lofts were moved to the west end of the nave. The 1940 terrazzo pavement extends to the chancel along the central aisle of the 1903 transept.

4. Wall finishes:

1882-84 Memorial Chapel: In the passage between the main chapel and the Memorial Chapel, a wainscot of lavender-colored brick rises above a wooden baseboard with a cyma reversa culminating molding. A stringcourse laid in modified common bond consists of two courses of alternating buff and lavender stretcher bricks, followed by one course of headers, in which buff and lavender bricks alternate. The passage walls above the stringcourse are buff brick and rise to a stone cornice.

In each of the two cells of the Memorial Chapel proper, an ashlar Ohio limestone veneer covers the walls between a stone molding modeled on the wooden baseboard in the passage and a terra cotta stringcourse below the window sills.⁹⁹ The west wall of the southern cell is faced below the course with a stone panel designed by Babcock and carved in a diaper pattern.¹⁰⁰ The alternating acanthus leaf and volute motif of the cornice on the exterior of the Memorial Chapel is repeated in the interior stringcourse. Above the terra cotta course, buff bricks laid in running bond enframe the five windows. At the transverse archway between the two cells, an Ohio limestone pier supports the transverse arch and diagonal ribs of the vaults. The capitals of the pier consist of the acanthus leaf and volute motif.

Nave and transepts: In all sections of the nave and transepts, oak wainscoting installed in 1898-99 runs along the walls to a height of nearly six feet. The paneling is stained a dark brown color and consists

⁹⁹Ibid, p. 15.

¹⁰⁰See Charles Babcock, architect, "Diaper Carving on Wall Behind Monument in the Memorial Chapel . . .," [undated], in Sage Chapel drawings collection, Facilities and Engineering.

of tongue and groove boards laid upright, surmounted by a rail. The walls above the wainscoting are covered with canvas installed in 1903-5 and painted. Immediately above the paneling is a narrow fretwork pattern, painted brown on a green field and running horizontally. Above the fretwork is a dark red or maroon field extending up to the corbels of the roof trusses, then a band of purple vines with periodic blossoms and shells running immediately below the springing points of the lancet windows in the walls. From the springing points to the cornice is a lavender-colored field with lines drawn across it to suggest the joints of ashlar masonry. Above the sixth course of sham masonry is a second fretwork pattern in yellow. The same scheme appears above the wainscoting in the 1940 section.

In the frieze of the cornice in the chapel are varnished wooden panels installed in 1903. Gold letters spell out the words of Christ's Great Commandment as one reads along the nave and transept walls. Above the frieze boards in the 1898 and 1903 gables is a yellow field with a greenish hue, upon which are painted gilded stars and undulating blue lines.¹⁰¹

Sage Apse: The walls of the five-sided apse are covered above the black marble seat lining the perimeter with seven mosaic panels presenting a processional allegory. Against a field of green with gold accents, life size figures present the achievement of Cornell University, of which Henry Sage was considered the "second founder." In the outer two panels, a man and woman in classical garb represent Co-education, which Cornell helped to pioneer in the United States. In the central panel, Philosophy sits enthroned, flanked in the intervening panels by groups of figures representing the other disciplines encompassed in the university: Literature, Art, Music, Astronomy, Biology, and Physics. Two other figures represent the philosophical pursuits of learning, Truth and Beauty. Approximately twelve colors are employed in the mosaics.¹⁰² Above the processional panels, an

¹⁰¹Ibid., p. 9.

¹⁰²Clark Northup, *ibid.*, pp. 11-13, described the concept of the artists, Charles R. and Ella

the mosaics.¹⁰² Above the processional panels, an ashlar, graystone veneer covers the apse walls to the cornice level.

5. Ceiling finishes:

1882-84 Memorial Chapel: Above the cornice of the passage leading to the Memorial Chapel is a tunnel vault rising to a point. In the vault, three courses of buff brick laid in running bond alternate with three courses of lavender brick, continuing the polychromatic scheme of the floor and walls below.

For the ceilings of the two cells in the Memorial Chapel itself, Babcock chose to erect ribbed vaults patterned after those of the Isle de France cathedrals of the 13th century.¹⁰³ The diagonal ribs are of Ohio limestone, gray in color, and contrast with the lighter webs of the vaults, which are constructed of Caen, France limestone. Bosses with foliate carvings appear at the intersection of the ribs. The diagonal ribs spring from polished red marble columns supported by Ohio limestone corbels of foliate design probably carved by Robert Richardson. The material of the foliate capitals is Ohio limestone.¹⁰⁴ The transverse arch between the

¹⁰²Clark Northup, *ibid.*, pp. 11-13, described the concept of the artists, Charles R. and Ella Condie Lamb and Chester Loomis, in his detailed 1905 account of Sage Chapel, and his description may be found in the Supplemental Material section of this report.

¹⁰³Babcock published several monographs on vaulting after he became Professor of Architecture at Cornell and was considered an authority on the subject by the 1880s, when his opinion was sought by the legislature of New York State as to the soundness of daring masonry vaults designed by Leopold Eidlitz for the State Assembly chamber in the Capitol at Albany. See Parsons, *op. cit.*, p. 81.

¹⁰⁴The device of using short columns supported by corbels as the apparent springing point for vaulted ceiling and trusswork had been used by Richard Upjohn in such commissions as Trinity Chapel, New York (1850-55) and by such High Church English architects as George E. Street, who employed

two cells is composed of a central pointed tunnel vault of Caen stone outlined by two Ohio stone ribs.

Nave and transepts: As noted above in the Structural System and Framing section, hammerbeam trusses support the rafters and purlins of the 1873-75 and 1940 nave and the 1903-5 transept. Tongue and groove boards laid across the rafters and purlins form the ceiling. The ridge of the nave is concealed by horizontal wooden panels running from the north to south slopes of the roof just above the tie beam of the trusswork. Hammerbeam trusses from the eastern part of the 1873 nave support the roofs of the three surviving 1898-99 transepts. The stone corbels that Robert Richardson carved in 1873 for the hammerbeam timbers feature varied natural themes, including evergreen needles and cones, swamp grass, flowers, strawberries, etcetera. The transverse and diagonal trusses of the crossings in the 1898-99 section are of Georgia pine and spring from stone corbels and from the architraves of two cast-iron columns.¹⁰⁵

In 1903, Cottier and Company of New York supervised a re-decoration scheme for all sections of the ceiling in the main chapel. As a result, today the timbers of the trusswork in the 1873, 1898, and 1903 sections are painted a dark green and decorated with "bands, frets, zigzags, and chevrons"¹⁰⁶ in yellow and orange. The sloping ceiling panels between each set of trusses are also colored dark green, on which an olive vine spreads its branches, leaves, and fruit. At the center of each sloping ceiling panel is an ecclesiastical symbol, painted on a quatrefoil-shaped canvas.¹⁰⁷ In the horizontal

Memorial Chapel in the Church of St. James the Less, Westminster, London (1859). See Eberhard Upjohn, op. cit., Figure 60 and Dixon and Muthesius, op. cit., Figure 200.

¹⁰⁵Northup, op. cit., p. 7.

¹⁰⁶Ibid., pp. 9-10.

¹⁰⁷The symbols are listed and given the interpretation intended by Cottier and Company and by Babcock in Northup's account, *ibid.*, pp. 9-11, reproduced in the Supplemental Material section.

panels, gold and red stars stand out in an azure-blue field, symbolizing the sky, while a flowing motif lines the border between the horizontal and sloping panels. The 1903 scheme of colors and symbols was continued in 1940 on the ceiling at the west end of the nave.

Sage Apse: Within the chancel archway, three pairs of six oaken braces treated as ribs support the five wooden facets of the roof on the Sage Apse. Each rib springs from an approximately four-foot high gray stone column detached from the wall and supported on corbels, following the treatment established in the Memorial Chapel. The corbels match those carved into acanthus leaves at the west and east ends of the 1898-99 sections of the nave. The capitals are a variation on the Corinthian formula. The facets of the apse ceiling are concave in shape and covered with mosaic panels designed by Frederick Stymetz Lamb depicting the golden figures of angels and archangels in a heavenly zone of green with gold accents.¹⁰⁸ The cornice dividing the gray stone apse walls from the ceiling is carved in a series of alternating acanthus leaves and fleur-de-lis.

6. Openings:

a. Doorways and doors:

1882-84 Memorial Chapel: Originally, solid oak doors led from the main chapel into the passage of the Memorial Chapel. In 1903 these were replaced by plate glass doors with gilded, wrought iron frames designed by the firm of J. and R. Lamb of New York. In the south wall of the Memorial Chapel, a portal leads the reverse direction into the passage. The pointed archway of the portal is composed of several recessed courses of brick voussoirs. The Ohio limestone jambs of the portal are stepped, with a colonette on each of the two steps.

Nave and transepts: Each of the eight doorways leading from the nave and transepts is of the

¹⁰⁸See Northup's description of the figures and explanation of their symbolic significance, *ibid.*, pp. 13-13, reproduced in the Supplemental Material section.

same design and holds doors of similar design. The two surviving 1873 archways, located over the entry to the Memorial Chapel passage and over the south exit to the 1873 section, served as the models for subsequent doorways. Over each of the eight openings, there are two lancet arches, an inner one containing the door and composed of lavender stretcher bricks, and an outer one, flush with the chapel walls and consisting of three courses. The first course is composed of alternating stretcher and header voussoirs; the second one, of headers only. The third course is of lavender headers. The double arches extend below the springing points to the rail of the oak wainscoting.

The doors leading into the main chapel from the vestibules of the south entrance to the 1873 section, south entries to the 1898-99 transepts, and entrance to the northwest transept are all double. The doors leading from the vestry and porch north of the Sage Apse are single, as is the one leading into the 1903 transept. Each of the doors in the main chapel are of solid oak and similar in design. The doors installed in 1903 are exactly the same: each one has four vertical panels outlined by a quatrefoil motif. There is an upraised surface within each panel. Rosettes are carved at the corners of the panels. In the oaken tympanum above each doorway is wooden tracery, consisting of three lancet arches with cusping surmounted by two trefoils. The doorway leading into the 1903 section was installed in 1940 and has a plain oaken tympanum and a door of matching design to those of 1903. The doors and tympanums are stained a dark brown.¹⁰⁹

There is a gray stone archway marking the entry into the Sage Apse from the chancel. The arch resembles the great archways in English and French cathedrals of the 13th century, leading from the crossing into the choir. The Sage Apse arch consists of three steps, each marked by deeply grooved moldings above slender colonettes with Corinthian capitals.

¹⁰⁹See Northup, op. cit., p. 8.

b. Windows:

1873-75 section: The reveals of the surviving 1873 windows were re-decorated in 1903. Nevertheless, the brick arcades of the two sets of triple windows have continued to date unchanged. Each arch in the older trio, part of the south wall, consists of alternating buff and lavender brick voussoirs. The 1873 design is replicated in the northern trio, installed as seen above¹¹⁰ in the early 1890s. The polychromatic and interlocking nature of the arcades probably derives from similar arcades employed in the interior of Deane and Woodward's Oxford Museum, erected with the advice of John Ruskin in 1855-60.¹¹¹

In the west wall of the nave is the 1873-75 Apostles' Window, the twelve radiating petals and outer quatrefoils of which represent the twelve apostles of Christ. The circular light at center, depicting a dove, represents the Holy Ghost.

1882-84 Memorial Chapel: The archways of the five windows in the Memorial Chapel each consist of a recessed inner brick arch containing the tracery and an outer arch flush with the chapel wall. Both of the buff-colored window archways are of molded brick and carry the alternating squared edge and cylindrical edge pattern seen in the exterior arches.

The art glass of several windows in the Memorial Chapel appears to have been installed during the construction of the edifice and carry as their common theme the place earned by Ezra Cornell for himself in the pantheon of great university founders. In the three lancets of the north window, Cornell appears in the east light, John Harvard of Harvard University in the west light, and William of Wykeham, the founder of several medieval colleges in England, in the central

¹¹⁰This was explained in the Alterations and Additions section.

¹¹¹For a photograph of the Oxford Museum arcades, see Dixon and Muthesius, op. cit., p. 160.

light. In the northwest window appear Elihu Yale of Yale University, Sir Thomas Bodley, founder of the Bodleian Library at Oxford University, and John McGraw, a founder of Cornell University and one of the deceased personages buried in the crypt below. In the northeast window appear Queen Jeanne de Navarre, founder of the College de Navarre, Jennie McGraw Fiske, benefactrix of Cornell University and another person buried below, and Lady Margaret Beaufort, founder of St. John's College, Cambridge University. The other panels of the Memorial Chapel windows were donated after 1883 and are described by Clark Northup in his pamphlet, "Sage Chapel: A Description."¹¹²

Nave and transepts: In 1903, the surrounds of all of the lancet windows in the nave and transepts were covered with canvas and painted in matching patterns. The splayed reveals of each are colored with a blue field, on which there are leaf designs. Each lancet has a wood sill formed by the top of the wainscoting rail below.¹¹³ Originally, in both the 1873-75 nave and 1898-99 transepts, the lancet windows were filled with stained glass in geometric patterns. In the years since, many have been replaced with art glass lights donated by patrons of the chapel. For example, the twin windows in the west wall of the southwest transept, depicting St. Elizabeth of Hungary and Florence Nightingale, were subscribed by friends of Margaret Hicks Volkmann of the class of 1878. The three windows in the southern arcade of the 1873 section, depicting Jesus of Nazareth with children and flanking angels, were donated in the late 1870's by President and Mrs. Andrew Dickson White in memory of their infant son. The most recent memorial window, appearing in the south wall of the southeast transept, was

¹¹²See Northup, op. cit., pp. 15-16, reproduced in the Supplemental Materials section.

¹¹³Northup, op. cit., p. 6.

donated by President and Mrs. Deane W. Malott in 1962.¹¹⁴

The four rose windows set in the transept gables are identical in pattern of tracery and in the stain glass design in each. Ecclesiastical symbols and varied colors are employed in the central leaved device and in the quatrefoils that ring it.

Sage Apse: As noted in the Additions and Alterations section of the report, the art glass lights of the large east window in the Sage Apse were donated in memory of Susan Linn Sage by her two sons in the late 1880s. When the chapel was rebuilt and expanded in 1898-99, the east window was moved to the new Sage Apse and reset in the present gray stone arch and sill. The four cusped lancets contain three tiers of art glass panels made by Cottier and Company of New York, representing the Christian graces and scenes from nine parables of the New Testament.

In the northeast and southeast facets of the apse are paired art glass windows, rectangular in shape and set in the gray stone zone above the processional mosaics. The reveals for each window are lined with ovolo moldings. Between each pair of windows, supporting the common lintel is a stone column matching that on the exterior of the apse facets. The art glass lights in the two pairs of windows depict Jesus, the Good Shepherd; St. John the Baptist; St. John the Evangelist; and a copy of Holman Hunt's famous painting, "The Light of the World,"¹¹⁵

¹¹⁴A description of the memorial windows donated as of 1905 is found in *ibid.*, pp. 16-18. See Supplemental Material section.

¹¹⁵Holman Hunt (1827-1910), a member of what became known as the Pre-Raphaelite Brotherhood of artists in England, painted "The Light of the World" in 1851-53. In 1873, the work was presented to Keble College at Oxford University for the just-completed Keble Chapel by William Butterfield, whose work had already influenced Babcock. In 1895, the painting was transferred to a side chapel at Keble constructed especially to house it. The

all in memory of members of the Sage family. There are also single, rectangular windows in the outer two facets of the apse, set in splayed reveals and containing single art glass lights created by Cottier and Company.¹¹⁶

7. Decorative features and trim:

1882-84 Memorial Chapel: Along the north, east, and west walls of the Memorial Chapel are stone monuments commemorating several of the people buried in the crypt below. Modeled on the sarcophagi found in the chapels of English cathedrals from the medieval period, the monuments consist of rectangular ornamental sarcophagi surmounted by larger-than-life sculptures of the deceased in repose. Occupying the position against the north wall, below the art glass panels comparing his achievement in founding Cornell University to those of John Harvard and William of Wykeham, is the monument of Ezra Cornell. A white marble figure of Cornell sculpted by William W. Story reclines on a sarcophagus-like base designed by Charles Babcock. Along the west wall of the southern cell of the chapel, against a stone diaper panel designed by Babcock, is a similar monument to Mary Amanda White, the first wife of President Andrew Dickson White. The recumbent figure, also of white marble, was sculpted by Moses Ezekiel. Against the east wall of the northern cell is a monument designed by Babcock in 1907 to commemorate the life of Jennie McGraw Fiske. A final monument, with a gabled "roof," rather than reclining statue, rests against the east wall of the southern cell. Tablets commemorating the lives of Mary Ann Cornell, wife of Ezra; George

transferred to a side chapel at Keble constructed especially to house it. The suitability of a copy of the famed painting for incorporation in the chapel of Cornell University must have seemed obvious to Babcock and perhaps also to his clients, the Sage family and the university. See Jeremy Maas, Holman Hunt and the Light of the World (London: Scholar Press, 1984), pp. ix; 96-99.

¹¹⁶The lights of the main east window and those of the innermost lights of the apse are signed by Cottier and Company.

between the two cells is a bronze bust of Hiram Sibley, founder of the Sibley College of Engineering at Cornell. The bust, designed by Herman A. MacNeil of the college, is supported on a marble shelf and corbel.¹¹⁷

Chancel area: The pulpit of Sage Chapel stands to the right of the chancel archway and was donated in 1903 by the family of Dean Sage, founder of the Sage Preachership. The pulpit is made of Caen, France limestone and is octagonal in shape. A winding stair at the right leads up into the pulpit, the floor of which is elevated some four feet above the chancel floor. A speaker standing in the pulpit has an unobstructed view of congregants in all sections of the chapel, transepts as well as the nave. The six full sides of the pulpit each form a bas relief, traceried panel, in which lancet arches culminate in trefoil cusping. Each panel is enframed by columns on molded bases with foliated capitals. The pulpit proper is supported by five squat columns with molded bases and foliated capitals. The columns themselves rest on a stepped, octagonal stone plinth, in which is inscribed the following: "In memory of Dean Sage, 1841-1902, Founder of the Preachership in this Chapel." The Sage pulpit resembles in most of its details the design used by the influential architect William Butterfield for the chancel pulpit in the Church of All Saints', Margaret Street, London (1850-59).¹¹⁸

¹¹⁷See descriptions in Northup, op. cit., pp. 15-16.

¹¹⁸Although the panels of the All Saints pulpit differed from Babcock's scheme, the octagonal shape, elevated platform supported by squat columns, and the columns enframing the panels were all similar. Another pulpit that may have served as a model for Babcock was that of the Church of St. James the Less, Westminster, London (1859), designed by another High Church architect, George E. Street. Butterfield's work set the standard for church design sanctioned by the English Ecclesiologists, and architects who followed in the 1850s and 1860s derived much from his example. For photographs of the All Saints and St. James the Less pulpits, see Dixon and Muthesius, op. cit., Figures 177 and 200.

8. Hardware: All of the oak doors entering into the chapel are opened by means of cast-iron rings with rope moldings.
9. Mechanical equipment:
 - a. Heating, ventilation: Historical photographs show steam radiators in the nave of the 1873 chapel as early as the 1880s.¹²² Currently there are cast-iron radiators of varying designs along the walls of the nave and transepts. Steam is provided by the steam-generating plant of Cornell University. In the Memorial Chapel, no radiators are visible. The 1940 choir loft at the west end of the nave is heated by forced air produced in a "Carrier Weathermaker" electric furnace located in the "Blower Room" at the west end of the basement. Vents for the forced air are placed against the walls, on the choir loft risers.

Ventilation of the chapel building is through casement lights in the lancet windows of the north and south elevations. Heat rising to the attic of the nave roof escapes through the ventilation openings already described.
 - b. Lighting: In the 1873-75 chapel, gas jets supplied lighting. In 1903-5, as part of the re-decoration by Cottier and Company, seven immense brass "electroliers," or chandeliers lighted by electricity, were installed.¹²³ Five hang from the king post pendants of the transverse trusses in the 1898-99 transepts. The sixth hangs from the pendant of the easternmost kingpost truss of the 1873 nave, and the seventh from the second hammerbeam truss in the 1903-5 section. Flood lights installed since World War II appear on the trusses above the choir loft and on the trusswork next to the Sage Apse.
 - c. Plumbing: Nothing notable is observable.

¹²²See Supplemental Material section, Historical Photograph 9.

¹²³Northup, op. cit., p. 8.

D. Site:

1. General setting and orientation: The nave of Sage Chapel runs east and west. The axes of the Memorial Chapel and the transepts run north and north. The chapel occupies the summit of an incline gently rising from the west and offers a view of the Cayuga Lake Valley and City of Ithaca below the campus. Until the 1960s, a second gently-sloping lawn led up to the chapel from the south. The construction in the late 1960s of the Cornell Campus Store, which rises above grade between Sage Chapel and Barnes Hall, removed the vista intended by Babcock of the chapel from the south. The evergreen shrubs and ivy planted adjacent to the chapel earlier in the twentieth century have become overgrown along the south, west, and north elevations of the nave.

When it was rebuilt at the turn of the century, Sage Chapel was the northern-most building in the lower, brick campus of Cornell University, in which a series of three red brick academic buildings--Sage College, Barnes Hall, and Sage Chapel--presented picturesque profiles in the midst of an informal, rolling landscape of lawns, trees, shrubs, and a winding brook. Much of this character has been lost during the twentieth century, as the university has grown and more recent buildings have been erected without reference to the pattern established by Charles Babcock, architect of the two Sage edifices.

2. Historic landscape design: The informal landscape approaches to Sage Chapel evident in historical photographs¹²⁴ have been recently removed along the north and south elevations. In 1986, the "Kerstin Thorin Baird Garden Court" was constructed by the Cornell Department of Buildings and Grounds in the U-shaped court formed by the northwest transept, 1903 addition, and Memorial Chapel. The new formal design consists of a pavement of concrete squares and brick pavers, substituted for the lawn and shrubs planted in 1884, 1899, and 1905. In the fall of 1987, a similar pavement was installed along the south elevation of the 1898-99 transepts.

A surviving artifact from the early twentieth century environs of the chapel is a stone well-head

¹²⁴See Supplemental Material section, Historical Photographs 2-6.

purchased by President Andrew Dickson White in Venice and placed by him in 1903 on the lawn between the 1882-84 Memorial Chapel and 1903-5 transept. The well-head is carved with volutes at each corner and heraldic devices, flowers, a lion, and foliated motifs on the sides. The artifact is inscribed with the motto of Venice: "Pax tibi, Marce, evangelista meus."¹²⁵

3. Outbuildings: There are none.

PART III. SOURCES OF INFORMATION

- A. Original Architectural Drawings: Over fifty original architectural drawings survive in the Sage Chapel collection of the Department of Manuscripts and University Archives in the John M. Olin Library at Cornell. Microfilm copies of these drawings are at the Cornell Department of Facilities and Engineering, in the Humphreys Services Building on the campus. The drawings include plans drafted by Charles Babcock for the 1873-75 original chapel, the 1882-84 Memorial Chapel, the 1898-99 transepts and apse, the 1903 addition, and miscellaneous detail drawings from the period 1882 to 1913. Drawings prepared by the Cornell Department of Buildings and Grounds for the 1940 addition and other alterations through the 1960s are also included. Copies of nineteen especially illustrative drawings have been submitted as supplemental material with this report.
- B. Early Views: The Cornell University Guide of 1875 presents one of the earliest known views of the original chapel, a woodcut illustration presenting the edifice as seen from the southwest. Historical photographs of the interiors of the 1873-75 main chapel, the 1882-84 Memorial Chapel, and the 1898-99 addition are found in a collection of photographs used in K. C. Parsons's book, The Cornell Campus. Several exterior views of the Memorial Chapel and main chapel from the northwest before and after construction of the 1903 addition are also contained in the Parsons collection. Several other photographs of the original chapel from the southeast and the interior of the transepts and chancel after redecoration in 1903 are found in the Parsons book itself.¹²⁶ Historical photographs of the exterior and

¹²⁵Ibid., p. 18.

¹²⁶Parsons, op. cit., pp. 84; 89.

interior of the 1873-75 Sage Chapel and the 1882-84 Memorial Chapel are provided in Ethel Goodstein's thesis on the career of Charles Babcock¹²⁷ and are reproduced in the Supplemental Materials section. Bird's-eye views of the original chapel from the south and from the northwest and a c. 1899 view of 1898-99 addition from the southwest are included in Seth L. Sheldon's Photographic Gems of c. 1899. Most of these views are included in the Supplemental Material section of this report.

C. Interviews: None were conducted.

D. Bibliography:

1. Primary and unpublished sources:

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¹²⁷Goodstein, op. cit.

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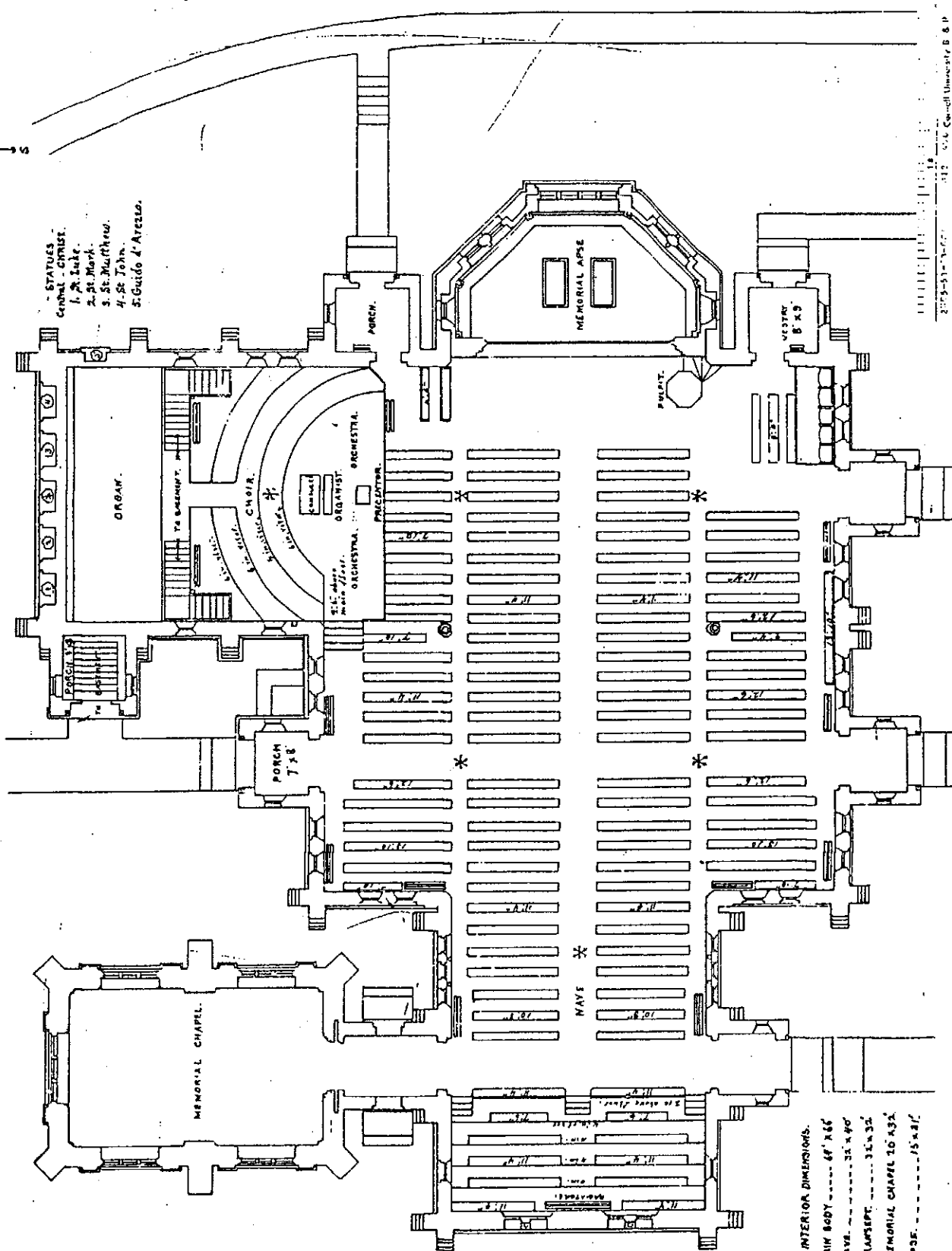
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-STATUES -
Central - CHURCH.
1. St. Luke.
2. St. Mark.
3. St. Matthew.
4 - St John.
5. Guido d'Arezzo.

GROUND PLAN OF THE SAGE CHAPEL OF CORNELL UNIVERSITY, ITHACA, N.Y. SCALE - $\frac{1}{8}$ INCH TO A FOOT.
February 20th 1903. *Chas. Beardslee, Architect.*

February 20th 1903.

N^o 25.



INTERIOR DIMENSIONS.

MAIN BODY	66' x 66'
NAVE	32' x 40'
TRANSSEPT	32' x 32'
MEMORIAL CHAPEL	10' x 32'
APSE	15' x 31'

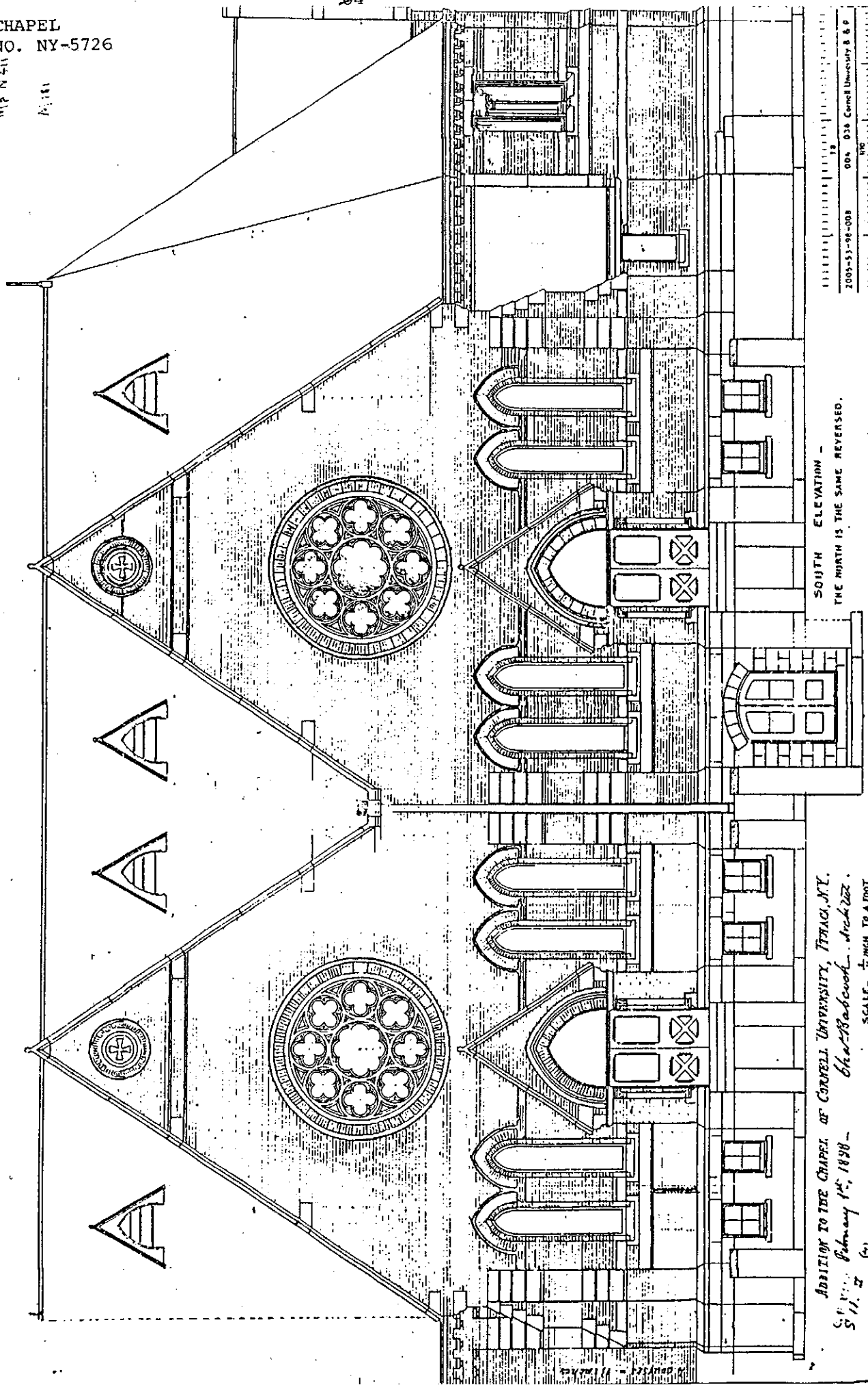
2025-51-3000

SAGE CHAPEL
HABS NO. NY-5726

M.P. N 411

P. 181

64 63



SOUTH ELEVATION -
THE NORTH IS THE SAME REVERSED.

ADDITION TO THE CHAPEL OF CORNELL UNIVERSITY, ITHACA, N.Y.
S. H. H. February 1st, 1898 - Chas. B. Borchers, Architect.
SCALE - 1/4" = 1 FOOT.

Carroll 242
Mar 29
Apr 7, 1975
John Smith
Cornell University

4130

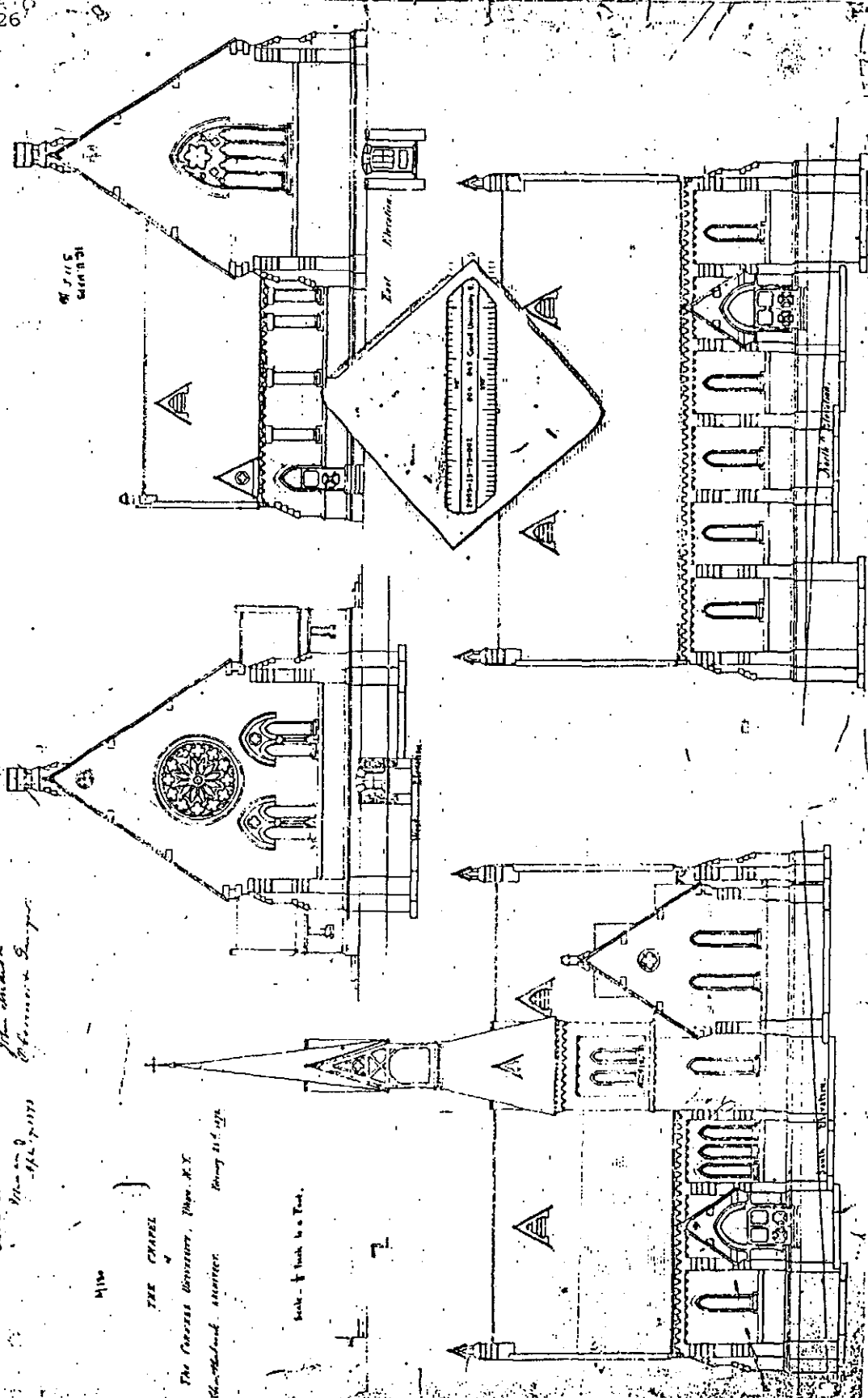
THE CHAPEL

The Cornell University, Ithaca, N.Y.

Architectural student

May 11, 1974

Scale - 1 inch = 10 feet



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- E. Likely Sources Not Yet Investigated: The Andrew Dickson White Papers and Henry W. Sage Papers at the Department of Manuscripts and University Archives were not investigated and may contain additional information regarding the design, construction, alterations, and purpose of Sage Chapel.

PART IV. PROJECT INFORMATION

This documentation report was commissioned by Historic Ithaca and Tompkins County, Inc. of Ithaca, New York. The project began in 1979 at the suggestion of Barclay G. Jones, then president of Historic Ithaca. Photographs of Sage Chapel were taken according to HABS standards by Jack C. Boucher in 1983. The documentation report was undertaken in the fall of 1987 under the direction of Barbara E. Ebert, Executive Director of Historic Ithaca. The report was prepared by James A. Glass, Ph.D., consultant to Historic Ithaca. Final preparation and submission was made by Stephen Law Callcott, M.A., consultant to Historic Ithaca.